# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Chevron Phillips Chemical Company, LP

AUTHORIZING THE OPERATION OF
Port Arthur Facility
Chevron Phillips Port Arthur Plant
Petrochemical Manufacturing

LOCATED AT

Jefferson County, Texas Latitude 29° 51' 9" Longitude 93° 58' 44" Regulated Entity Number: RN100209857

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:	O1235	Issuance Date: _	
For the Co	ommission		

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#### **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

#### **Special Terms and Conditions:**

#### Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
  - E. Emission units subject to 40 CFR Part 63, Subparts, A, F, G, H, YY, ZZZZ, and DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30

TAC Chapter 113, Subchapter C, §113.100, §113.110, §113.120, §113.130, §113.560, §113.1090, and §113.1130 respectively, which incorporate the 40 CFR Part 63 Subparts by reference.

- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)
    - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
    - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity

requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
    - (2) Records of all observations shall be maintained.
    - (3)Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet. observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to

condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height (h<sub>e</sub>) less than the standard effective stack height (H<sub>e</sub>), must reduce the allowable emission level by multiplying it by [h<sub>e</sub>/H<sub>e</sub>]<sup>2</sup> as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
  - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(a)(1).
- 5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements for wastewater drains, junction boxes, lift stations and weirs:
  - A. Title 30 TAC § 115.142 (relating to Control Requirements)
  - B. Title 30 TAC § 115.142(1)(A) (D) (relating to Control Requirements)
  - C. Title 30 TAC § 115.142(1)(E) and (F) (relating to Control Requirements)
  - D. Title 30 TAC § 115.145 (relating to Approved Test Methods)
  - E. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)
  - F. Title 30 TAC § 115.148 (relating to Determination of Wastewater Characteristics)
- 6. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
  - A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities specified in 30 TAC Chapter 115, Subchapter C, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 115.221 (relating to Emission Specifications)
    - (ii) Title 30 TAC § 115.222 (relating to Control Requirements)
    - (iii) Title 30 TAC § 115.223 (relating to Alternate Control Requirements)
    - (iv) Title 30 TAC § 115.224 (relating to Inspection Requirements)
    - (v) Title 30 TAC § 115.225 (relating to Testing Requirements)
    - (vi) Title 30 TAC § 115.226 (relating to Recordkeeping Requirements)
- 7. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:
  - A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 115.541(a) (c) (relating to Emission Specifications)
    - (ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks
    - (iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
    - (iv) Title 30 TAC § 115.542(b) (d), (relating to Control Requirements)

- (v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
- (vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
- (vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
- (viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
- (ix) Title 30 TAC § 115.544(b)(2)(A) (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)
- (x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring
- (xi) Title 30 TAC § 115.544(c), and (c)(1) (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xii) Title 30 TAC § 115.545(1) (7), (9) (11) and (13) (relating to Approved Test Methods)
- (xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
- (xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
- (xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xvi) Title 30 TAC § 115.547(4) (relating to Exemptions)
- 8. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)

- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 9. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
  - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
  - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
  - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
  - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
  - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
  - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
  - H. Title 40 CFR § 61.15 (relating to Modification)
  - I. Title 40 CFR § 61.19 (relating to Circumvention)
- 10. For facilities where total annual benzene quantity from waste is greater than or equal to 10 megagrams per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.342(c)(1)(i) (iii) (relating to Standards: General)
  - B. Title 40 CFR § 61.342(c)(2) (relating to Standards: General)
  - C. For exempting waste streams:
    - (i) Title 40 CFR § 61.342(c)(3)(i) (relating to Standards: General)
    - (ii) Title 40 CFR § 61.342(c)(3)(ii)(A) (C) (relating to Standards: General)
  - D. Title 40 CFR § 61.342(f)(1), and (2) (relating to Standards: General)
  - E. Title 40 CFR § 61.342(g) (relating to Standards: General)
  - F. Title 40 CFR § 61.350(a) and (b) (relating to Standards: Delay of Repair)
  - G. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(6), (b), and (c)(1) (3) (relating to Test Methods, Procedures, and Compliance Provisions)
  - H. Title 40 CFR § 61.355(j) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
  - I. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
  - J. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
  - K. Title 40 CFR § 61.356(b)(2)(i) (ii) (relating to Recordkeeping Requirements)

- L. Title 40 CFR § 61.356(b)(5) (relating to Recordkeeping Requirements)
- M. Title 40 CFR § 61.356(c) (relating to Recordkeeping Requirements)
- N. Title 40 CFR § 61.357(a), (d)(1), (d)(2) (d)(6) and (d)(8) (relating to Reporting Requirements)
- O. Title 40 CFR § 61.357(d)(3) (relating to Reporting Requirements)
- 11. For facilities with containers subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.345(a)(1) (3), (b), and (c) (relating to Standards: Containers)
  - B. Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
  - C. Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
  - D. Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
- 12. For facilities with individual drain systems subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.346(a)(1)(i)(A), (B), (ii), (2), and (3) (relating to Standards: Individual Drain Systems)
  - B. Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
  - C. Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
  - D. Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
- 13. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 14. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).
- 15. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 1 or Group 2 wastewater streams that are also subject to 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
  - A. Title 40 CFR § 63.110(e)(1) (relating to Applicability), for 40 CFR Part 63, Subpart G applicability to Group 1 or 2 Wastewater Streams
- 16. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

- A. Title 40 CFR § 63.132(b), (b)(1), (b)(1)(i), (b)(2), and (b)(2)(i) (relating to Process Wastewater Provisions General)
- B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions Reporting)
- C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions Recordkeeping)
- 17. For the chemical manufacturing facilities subject to wastewater operations requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
  - A. Title 40 CFR § 63.135(a) (f) (relating to Process Wastewater Provisions Containers)
  - B. Title 40 CFR § 63.136(a) (relating to Process Wastewater Provisions Individual Drain Systems)
  - C. Title 40 CFR § 63.136(b) (d) (relating to Process Wastewater Provisions Individual Drain Systems)
- 18. For the chemical manufacturing facilities subject to requirements of certain liquid streams in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
  - A. Title 40 CFR § 63.149(a), for control requirements
  - B. Title 40 CFR § 63.152(a)(1) (5) (relating to General Reporting and Continuous Records)
  - C. Title 40 CFR §§ 63.151(a)(6)(i) (v), (b)(1) (2), (j)(1) (3), 63.152(a)(1) (5), (b), (b)(1)(i) (ii), (b)(4) (relating to Initial Notification)
- 19. For transfer of waste from ethylene production facilities subject to 40 CFR Part 63, Subpart YY the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.560 incorporated by reference):
  - A. Title 40 CFR § 63.1096(a) (d) (Title 30 TAC Chapter 113, Subchapter C, § 113.550 incorporated by reference)
  - B. Title 40 CFR § 63.1109(a) and (c)
- 20. For benzene laden waste streams from ethylene process facilities subject to 40 CFR Part 63, Subpart YY with total annual benzene quantity from the facility of 10 megagrams per year or more the permit holder shall comply with the following requirements as specified in 40 CFR § 63.1095(b)(2) (Title 30 TAC Chapter 113, Subchapter C, § 113.560 incorporated by reference):
  - A. For facilities with waste managed in containers the permit holder shall comply with the following requirements:
    - (i) Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
    - (ii) Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
    - (iii) Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)

- B. For facilities with waste managed in individual drain systems the permit holder shall comply with the following requirements:
  - (i) Title 40 CFR § 61.346(a)(1)(i)(A), (B), (ii), (2), and (3) (relating to Standards: Individual Drain Systems)
  - (ii) Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
  - (iii) Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
  - (iv) Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)

#### **Additional Monitoring Requirements**

- 21. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
  - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
  - E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:
    - (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or
    - (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.

- F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
- 22. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

- 23. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
- 24. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 25. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **Compliance Requirements**

26. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

- 27. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Beaumont-Port Arthur Nonattainment area, 30 TAC § 117,9000
  - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.150(c) and (c)(1).
- 28. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) Offsets for Title 30 TAC Chapter 116
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
    - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
    - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
- 29. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables

- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
  - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
  - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
  - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

#### **Risk Management Plan**

30. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

#### **Protection of Stratospheric Ozone**

- 31. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
  - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
  - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 § 82.270 and the applicable Part 82 Appendices.

#### **Alternative Requirements**

32. The permit holder shall comply with the approved alternate method of compliance (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator, demonstrating the

method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

#### **Permit Location**

33. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

#### Permit Shield (30 TAC § 122.148)

34. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

#### **Attachments**

**Applicable Requirements Summary** 

**Additional Monitoring Requirements** 

**Permit Shield** 

**New Source Review Authorization References** 

**Alternative Requirement** 

#### **Applicable Requirements Summary**

Unit Summary	18	3
Applicable Requirements Summary	36	5

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
ADMINGEN	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
ADMINGEN	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
AIRJAM1	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
AIRJAM1	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
AIRJAM2	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
AIRJAM2	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
BA-113	PROCESS HEATERS/ FURNACES	N/A	R7201	30 TAC Chapter 117, Subchapter B	No changing attributes.
BA-113	PROCESS HEATERS/ FURNACES	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDD	No changing attributes.
BOILERGEN	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
BOILERGEN	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
BOILERSW	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
BOILERSW	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
CONTROLRM	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
CONTROLRM	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-1	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR01.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-2	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR02.
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-3	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR03.
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-4	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Flare., Subpart NNN Control Device ID No. = E-24-FLARE.
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-5	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPBOIL.
DA-408	DISTILLATION OPERATIONS	N/A	60NNN-6	40 CFR Part 60, Subpart NNN	Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = BA-113.
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-1	40 CFR Part 60, Subpart NNN	Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system., Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR01.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-2	40 CFR Part 60, Subpart NNN	Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system., Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR02.
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-3	40 CFR Part 60, Subpart NNN	Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system., Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPFUR03.
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-5	40 CFR Part 60, Subpart NNN	Vent Type = A single distillation unit discharging vent stream into a vapor recovery system., Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = GRPBOIL.
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-6	40 CFR Part 60, Subpart NNN	Vent Type = A single distillation unit discharging vent stream into a vapor recovery system., Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr)., Subpart NNN Control Device ID No. = BA-113.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
DA-409	DISTILLATION OPERATIONS	N/A	60NNN-9	40 CFR Part 60, Subpart NNN	Vent Type = Two or more distillation units discharging vent stream into a common vapor recovery system., Subpart NNN Control Device = Flare., Subpart NNN Control Device ID No. = E-24-FLARE.
DEG1	SOLVENT DEGREASING MACHINES	N/A	R5412(1)	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
E-01A-1544	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E-10-1544	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
E-10-1544	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
E-11-1544	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
E-137-CT	INDUSTRIAL PROCESS COOLING TOWERS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
E-17-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
E-17-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
E-17-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G-2	40 CFR Part 63, Subpart G	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E-17-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
E-24-FLARE	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E-24-FLARE	FLARES	N/A	60A-1	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
E-24-FLARE	FLARES	N/A	60A-2	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
E-24-FLARE	FLARES	N/A	60A-3	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)
E-24-FLARE	FLARES	N/A	63A-1	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
E-24-FLARE	FLARES	N/A	63A-2	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E-24-FLARE	FLARES	N/A	63A-3	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
E-24-FLARE	CLOSED VENT SYSTEM AND CONTROL DEVICE	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
E-24-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
E-24-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
E-24-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
E-40-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
E-40-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E-40-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G-1	40 CFR Part 63, Subpart G	No changing attributes.
E-40-HDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
EUCATSTACK	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-17-FLARE	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
F-17-FLARE	FLARES	N/A	60A-1	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
F-17-FLARE	FLARES	N/A	60A-2	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
F-17-FLARE	FLARES	N/A	60A-3	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)
F-17-FLARE	CLOSED VENT SYSTEM AND CONTROL DEVICE	N/A	61FF	40 CFR Part 61, Subpart FF	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-17-FLARE	FLARES	N/A	63A-1	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
F-17-FLARE	FLARES	N/A	63A-2	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
F-17-FLARE	FLARES	N/A	63A-3	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
F-17-FLARE	CLOSED VENT SYSTEM AND CONTROL DEVICE	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
F-40-FLARE	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
F-40-FLARE	FLARES	N/A	60A-1	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
F-40-FLARE	FLARES	N/A	60A-2	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-40-FLARE	FLARES	N/A	60A-3	40 CFR Part 60, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)
F-40-FLARE	CLOSED VENT SYSTEM AND CONTROL DEVICE	N/A	61FF	40 CFR Part 61, Subpart FF	No changing attributes.
F-40-FLARE	FLARES	N/A	63A-1	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
F-40-FLARE	FLARES	N/A	63A-2	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
F-40-FLARE	FLARES	N/A	63A-3	40 CFR Part 63, Subpart A	Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).
F-40-FLARE	CLOSED VENT SYSTEM AND CONTROL DEVICE	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
FA-124	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FA-129	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
FA-129	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Control Device ID No. = GRPBOIL.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10., Control Device ID No. = BA-113.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10., Control Device ID No. = GRPBOIL.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Control Device ID No. = GRPFUR01.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-4	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10., Control Device ID No. = GRPFUR01.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-5	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Control Device ID No. = GRPFUR02.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-6	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10., Control Device ID No. = GRPFUR02.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-7	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Control Device ID No. = GRPFUR03.
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-8	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10., Control Device ID No. = GRPFUR03.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FGHDR	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121-9	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule., Control Device ID No. = BA-113.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	60VV-ALL	40 CFR Part 60, Subpart VV	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	61J-ALL	40 CFR Part 61, Subpart J	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	61V-ALL	40 CFR Part 61, Subpart V	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	63UU-ALL	40 CFR Part 63, Subpart YY	No changing attributes.
GEN6000TK	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPBOIL	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	B6100, B6200, B6300	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPBOIL	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	B6100, B6200, B6300	60Db-1	40 CFR Part 60, Subpart Db	No changing attributes.
GRPBOIL	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	B6100, B6200, B6300	63DDDD- 01	40 CFR Part 63, Subpart DDDDD	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPFUR01	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	BA-101, BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, BA-108, BA-109, BA-110, BA-111, BA-112	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPFUR01	PROCESS HEATERS/ FURNACES	BA-101, BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, BA-108, BA-109, BA-110, BA-111, BA-112	R7201	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRPFUR01	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	BA-101, BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, BA-108, BA-109, BA-110, BA-111, BA-112	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
GRPFUR02	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	BA-115, BA-116, BA-117, BA-118	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPFUR02	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	BA-115, BA-116, BA-117, BA-118	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
GRPFUR03	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	BA-301, BA-401	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPSMLTK1	STORAGE TANKS/ VESSELS	P6710TNK, TK-3, TK-4, TK-500339, TK-C13119, TK-C13120, TK-C13126, TK-C13129, TK-C13130, TK-FA-235, TK-FA-310X, TK-FA-311X, TK-FA-311X, TK-FA-40BX, TK-FA-505X, TK-FA-506X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA606X, TK-FA609X, TK-FB-304, TK-M78920, TK-M78921, TK-N80118, TK-N80119	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
J-3	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
J-4	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PROCU1544	CHEMICAL MANUFACTURING PROCESS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
PROCU1740	CHEMICAL MANUFACTURING PROCESS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
PROCU1741	CHEMICAL MANUFACTURING PROCESS	N/A	63F	40 CFR Part 63, Subpart F	No changing attributes.
RADTWRENG2	SRIC ENGINES	N/A	601111	40 CFR Part 60, Subpart IIII	No changing attributes.
RADTWRENG2	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
REGVLD	LOADING/UNLOADING OPERATIONS	N/A	R5121-1	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia., Transfer Type = Loading and unloading.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
REGVLD	LOADING/UNLOADING OPERATIONS	N/A	R5121-2	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Transfer Type = Only unloading.
SWPUMPENG	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
T-2000	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-1	30 TAC Chapter 115, Water Separation	No changing attributes.
T-2000	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-2	30 TAC Chapter 115, Water Separation	No changing attributes.
T-2000	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	61FF-1	40 CFR Part 61, Subpart FF	No changing attributes.
T-2000	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	61FF-2	40 CFR Part 61, Subpart FF	No changing attributes.
T-2158	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-2158	STORAGE TANKS/ VESSELS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
T-2176	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-2176	STORAGE TANKS/ VESSELS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
T-2177	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-2177	STORAGE TANKS/ VESSELS	N/A	63YY	40 CFR Part 63, Subpart YY	No changing attributes.
T-301	DISTILLATION OPERATIONS	N/A	60NNN-22	40 CFR Part 60, Subpart NNN	No changing attributes.
T-301	DISTILLATION OPERATIONS	N/A	60NNN-23	40 CFR Part 60, Subpart NNN	No changing attributes.
T-302	DISTILLATION OPERATIONS	N/A	60NNN-22	40 CFR Part 60, Subpart NNN	No changing attributes.
T-302	DISTILLATION OPERATIONS	N/A	60NNN-23	40 CFR Part 60, Subpart NNN	No changing attributes.
T-502	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-800	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-800	STORAGE TANKS/ VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
T-809	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-815	STORAGE TANKS/ VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-815	STORAGE TANKS/ VESSELS	N/A	63G-1	40 CFR Part 63, Subpart G	No changing attributes.
T-816	STORAGE TANKS/ VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-816	STORAGE TANKS/ VESSELS	N/A	60Kb-1	40 CFR Part 60, Subpart Kb	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-822	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-822	STORAGE TANKS/VESSELS	N/A	60Kb-1	40 CFR Part 60, Subpart Kb	No changing attributes.
T-834	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-834	STORAGE TANKS/ VESSELS	N/A	60Kb	40 CFR Part 60, Subpart Kb	No changing attributes.
T-DIES-ETH-A	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-DIES-ETH-B	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-FB-203	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-6800	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-6810	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C13125	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38341	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38342	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38343	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

# **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
TK-C38344	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38417	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38418	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-C38419	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-FA214XR	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK-N80120	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
V-309	WASTEWATER UNITS	N/A	R5142-1	30 TAC Chapter 115, Industrial Wastewater	No changing attributes.
V-309	WASTEWATER UNITS	N/A	R5142-2	30 TAC Chapter 115, Industrial Wastewater	No changing attributes.
V-5400	REACTOR	N/A	60RRR-1	40 CFR Part 60, Subpart RRR	No changing attributes.
V-5400	REACTOR	N/A	60RRR-2	40 CFR Part 60, Subpart RRR	No changing attributes.
XV-9	STORAGE TANKS/ VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
XV-9	STORAGE TANKS/VESSELS	N/A	60Kb-2	40 CFR Part 60, Subpart Kb	No changing attributes.

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ADMINGEN	EU	601111	со	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
ADMINGEN	EU	601111	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ADMINGEN	EU	601111	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during lugging, 50% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3).	None	None	[G]§ 60.4214(d)
ADMINGEN	EU	601111	РМ	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ADMINGEN	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)
AIRJAM1	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218 § 89.112(a)	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AIRJAM1	EU	601111	NMHC and NO <sub>X</sub>	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218 § 89.112(a)	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 75 KW but less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 - 2013 model year must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a) and 40 CFR 1039.102.	None	None	None
AIRJAM1	EU	60IIII	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Owners and operators of non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder and is not a constant-speed engine and is a 2007 model year and later must comply with the following opacity emission limits: 20% during the acceleration mode, 15% during the lugging mode, and 50% during the peaks in either the acceleration or lugging modes as stated in 40 CFR 60.4201(a)-(c) and 40 CFR 89.113(a)(1)-(3).	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AIRJAM1	EU	60IIII	PM	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218 § 89.112(a)	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 - 2010 model year must comply with a PM emission limit of 0.20 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a).	None	None	None
AIRJAM1	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AIRJAM2	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4204 (a)-Table 1 § 60.4206 § 60.4207(b) § 60.4211(b) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and a displacement of less than 10 liters per cylinder and is a pre-2007 model year must comply with a CO emission limit of 11.4 g/KW-hr, as listed in Table 1 to this subpart.	None	§ 60.4211(b)(3) [G]§ 60.4214(a)(2)	[G]§ 60.4214(a)(1)
AIRJAM2	EU	601111	Hydrocarbon s	40 CFR Part 60, Subpart IIII	§ 60.4204 (a)-Table 1 § 60.4206 § 60.4207(b) § 60.4211(b) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and a displacement of less than 10 liters per cylinder and is a pre-2007 model year must comply with an HC emission limit of 1.3 g/KW-hr, as listed in Table 1 to this subpart.	None	§ 60.4211(b)(3) [G]§ 60.4214(a)(2)	[G]§ 60.4214(a)(1)
AIRJAM2	EU	60IIII	NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4204 (a)-Table 1 § 60.4206 § 60.4207(b) § 60.4211(b) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 37 KW and a displacement of less than 10 liters per cylinder and is a pre-2007 model year must comply with a NOx emission limit of 9.2 g/KW-hr, as listed in Table 1 to this subpart.	None	§ 60.4211(b)(3) [G]§ 60.4214(a)(2)	[G]§ 60.4214(a)(1)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AIRJAM2	EU	601111	PM	40 CFR Part 60, Subpart IIII	§ 60.4204 (a)-Table 1 § 60.4206 § 60.4207(b) § 60.4211(b) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and a displacement of less than 10 liters per cylinder and is a pre-2007 model year must comply with a PM emission limit of 0.54 g/KW-hr, as listed in Table 1 to this subpart.	None	§ 60.4211(b)(3) [G]§ 60.4214(a)(2)	[G]§ 60.4214(a)(1)
AIRJAM2	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BA-113	EU	R7201	NOx	30 TAC Chapter 117, Subchapter B	§ 117.110(a)(2) § 117.110(a) § 117.110(b) [G]§ 117.110(b)(1) § 117.130(d) § 117.140(k)	No person shall allow the discharge into the atmosphere from any gasfired process heaters with a maximum rated capacity equal to or greater than 40 MMBtu emissions of NO <sub>x</sub> in excess of 0.08 lb/MMBtu of heat input.	[G]§ 117.135(a)(1) § 117.135(a)(4) § 117.135(b) § 117.135(c) § 117.135(d) § 117.135(f) § 117.135(f) § 117.135(f) § 117.135(g) § 117.140(a) § 117.140(b)(1) § 117.140(c)(1) [G]§ 117.140(c)(3) § 117.140(e) § 117.140(e) § 117.8100(a) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(5)(E)	§ 117.145(a) § 117.145(f) § 117.145(f)(1) [G]§ 117.145(f)(2) § 117.145(f)(8) § 117.145(f)(9) § 117.8100(a)(5)(C)	§ 117.135(b) § 117.135(g) [G]§ 117.145(b) [G]§ 117.145(c) § 117.145(d) § 117.145(d)(1) § 117.145(d)(2) § 117.145(d)(3) § 117.145(d)(4) § 117.145(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8010(8)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BA-113	EU	R7201	СО	30 TAC Chapter 117, Subchapter B	§ 117.110(c)(1) § 117.110(c) § 117.110(c)(1)(A) § 117.110(c)(3)	atmosphere from any process heater subject to NO <sub>x</sub> emission specifications in § 117.110(a) CO in excess of 400 ppmv at 3.0% oxygen, dry basis, except as provided in § 117.125 or § 117.110(c)(3).		§ 117.145(a) § 117.145(f) § 117.145(f)(1) [G]§ 117.145(f)(2) § 117.145(f)(8) § 117.145(f)(9) § 117.8100(a)(5)(C)	\$ 117.135(b) \$ 117.135(g) [G]\$ 117.145(b) [G]\$ 117.145(c) \$ 117.145(d)(1) \$ 117.145(d)(2) \$ 117.145(d)(3) \$ 117.145(d)(4) \$ 117.145(d)(5) \$ 117.145(d)(5) \$ 117.8010 [G]\$ 117.8010(2) \$ 117.8010(2)(A) \$ 117.8010(2)(B) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BA-113	EU	63DDDD D	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
BOILERGEN	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOILERGEN	EU	601111	NMHC and NO <sub>X</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
BOILERGEN	EU	601111	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOILERGEN	EU	601111	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
BOILERGEN	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOILERSW	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
BOILERSW	EU	601111	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOILERSW	EU	601111	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3).	None	None	[G]§ 60.4214(d)
BOILERSW	EU	601111	РМ	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.30 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOILERSW	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
CONTROLR M	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
CONTROLR M	EU	601111	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
CONTROLR M	EU	60IIII	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
CONTROLR M	EU	601111	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
CONTROLR M	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)
DA-408	EP	60NNN-1	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	concentration of 20ppmv,	\$ 60.663(c) \$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.664(a) \$ 60.664(b) \$ 60.664(b)(1) \$ 60.664(b)(2) \$ 60.664(b)(3) [G]\$ 60.664(b)(4) **See Alternative Requirement	\$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.665(b) \$ 60.665(b)(2) \$ 60.665(b)(2)(i) \$ 60.665(b)(2)(ii) \$ 60.665(c) \$ 60.665(c) \$ 60.665(c)(3) \$ 60.665(c)(4) \$ 60.665(d)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(ii) § 60.665(b)(2)(iii) § 60.665(c) § 60.665(c)(3) § 60.665(c)(4) § 60.665(k) § 60.665(l) § 60.665(l)(2)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DA-408	EP	60NNN-2	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l) § 60.665(l)(2) § 60.665(l)(3)
DA-408	EP	60NNN-3	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(c)(2) § 60.664(a) § 60.664(b) § 60.664(b)(1) § 60.664(b)(2) § 60.664(b)(3) [G]§ 60.664(b)(4) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(c)(2) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(b)(2)(ii) § 60.665(c) § 60.665(c)(3) § 60.665(c)(4) § 60.665(d)	§ 60.665(a) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(b)(2)(ii) § 60.665(c) § 60.665(c) § 60.665(c)(4) § 60.665(k) § 60.665(l) § 60.665(l) § 60.665(l)(2)
DA-408	EP	60NNN-4	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e) **See Alternative Requirement	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DA-408	EP	60NNN-5	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l)(1) § 60.665(l)(2) § 60.665(l)(3)
DA-408	EP	60NNN-6	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l)(1) § 60.665(l)(2) § 60.665(l)(3)
DA-409	EP	60NNN-1	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	concentration of 20ppmv,	\$ 60.663(c) \$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.664(a) \$ 60.664(b) \$ 60.664(b)(1) \$ 60.664(b)(2) \$ 60.664(b)(3) [G]\$ 60.664(b)(4) **See Alternative Requirement	\$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.665(b) \$ 60.665(b)(2) \$ 60.665(b)(2)(ii) \$ 60.665(b)(2)(iii) \$ 60.665(c) \$ 60.665(c)(3) \$ 60.665(c)(4) \$ 60.665(d)	\$ 60.665(a) \$ 60.665(b) \$ 60.665(b)(2)(i) \$ 60.665(b)(2)(ii) \$ 60.665(b)(2)(ii) \$ 60.665(c) \$ 60.665(c)(3) \$ 60.665(c)(4) \$ 60.665(k) \$ 60.665(l) \$ 60.665(l)(2)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DA-409	EP	60NNN-2	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l)(1) § 60.665(l)(2) § 60.665(l)(3)
DA-409	EP	60NNN-3	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a	\$ 60.663(c) \$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.664(a) \$ 60.664(b) \$ 60.664(b)(1) \$ 60.664(b)(2) \$ 60.664(b)(3) [G]\$ 60.664(b)(4) **See Alternative Requirement	\$ 60.663(c)(1) \$ 60.663(c)(2) \$ 60.665(b) \$ 60.665(b)(2) \$ 60.665(b)(2)(i) \$ 60.665(b)(2)(ii) \$ 60.665(c) \$ 60.665(c) \$ 60.665(c)(4) \$ 60.665(d)	\$ 60.665(a) \$ 60.665(b) \$ 60.665(b)(2) \$ 60.665(b)(2)(ii) \$ 60.665(b)(2)(iii) \$ 60.665(c) \$ 60.665(c)(3) \$ 60.665(c)(4) \$ 60.665(k) \$ 60.665(l) \$ 60.665(l) \$ 60.665(l)(2)
DA-409	EP	60NNN-5	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)		§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c)(4) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) (2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l) § 60.665(l)(2) § 60.665(l)(3)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DA-409	EP	60NNN-6	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(d) § 60.664(c) **See Alternative Requirement	§ 60.663(c)(1) § 60.663(d) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(d) § 60.665(e)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(c) § 60.665(c) § 60.665(k) § 60.665(l) § 60.665(l)(1) § 60.665(l)(2) § 60.665(l)(3)
DA-409	EP	60NNN-9	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e) **See Alternative Requirement	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)
DEG1	EU	R5412(1)	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) § 115.412(1)(D) [G]§ 115.412(1)(F)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
E-01A-1544	EP	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-10-1544	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None
E-10-1544	EU	601111	NMHC and NO <sub>X</sub>	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 75 KW but less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 - 2013 model year must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 89.112(a) and 40 CFR 1039.102.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-10-1544	EU	601111	РМ	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 130 KW and less than 560 KW and a displacement of less than 10 liters per cylinder and is a 2011 model year and later must comply with a PM emission limit of 0.02 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	[G]§ 60.4214(d)
E-10-1544	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-11-1544	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
E-137-CT	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
E-17-HDR	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-17-HDR	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	of this title must be controlled properly with a	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
E-17-HDR	EP	63G-2	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare.§63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(b) [G]§ 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2) § 63.152(c)(2) § 63.152(c)(2)(iii) § 63.152(c)(2)(iii) § 63.152(c)(4)(iii) [G]§ 63.152(c)(4)(iii) [G]§ 63.152(c)(6)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-17-HDR	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
E-24-FLARE	CD	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
E-24-FLARE	CD	60A-1	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
E-24-FLARE	CD	60A-2	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-24-FLARE	CD	60A-3	OPACITY	40 CFR Part 60, Subpart A	\$ 60.18(b) \$ 60.18(c)(1) \$ 60.18(c)(2) \$ 60.18(c)(3)(ii) \$ 60.18(c)(4)(ii) \$ 60.18(c)(6) \$ 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
E-24-FLARE	CD	63A-1	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
E-24-FLARE	CD	63A-2	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
E-24-FLARE	CD	63A-3	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-24-FLARE	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
E-24-HDR	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
E-24-HDR	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-24-HDR	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
E-40-HDR	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
E-40-HDR	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E-40-HDR	EP	63G-1	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare.§63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(2) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(1) [G]§ 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2) § 63.152(c)(2) § 63.152(c)(2)(ii) [G]§ 63.152(c)(2)(iii) § 63.152(c)(2)(iii) § 63.152(c)(4)(iii) [G]§ 63.152(c)(4)(iii) [G]§ 63.152(c)(6)
E-40-HDR	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EUCATSTAC K	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
F-17-FLARE	CD	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
F-17-FLARE	CD	60A-1	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
F-17-FLARE	CD	60A-2	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
F-17-FLARE	CD	60A-3	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-17-FLARE	CD	61FF	BENZENE	40 CFR Part 61, Subpart FF	§ 61.349(a) § 60.18 § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(b) § 61.349(e) § 61.349(f) § 61.354(c)	For each closed-vent system and control device used to comply with §§61.343-61.348, properly design, install, operate, and maintain the closed-vent system and control device.	§ 60.18(f)(2) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h)	§ 61.354(c) § 61.354(c)(3) § 61.356(f) § 61.356(f)(2)(i)(D) § 61.356(f)(2)(i)(D) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(7)	§ 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F)
F-17-FLARE	CD	63A-1	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
F-17-FLARE	CD	63A-2	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-17-FLARE	CD	63A-3	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
F-17-FLARE	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.149(a) § 63.11 § 63.139(b) § 63.139(c)(3) § 63.139(f) [G]§ 63.145(j) § 63.172(a) [G]§ 63.172(h) § 63.172(i)	Owner shall comply with the provisions of table 35 of this subpart, for each item of equipment meeting all the criteria specified in (b)-(d) and either paragraph (e)(1) or (e)(2) of this section.	§ 63.139(d)(3) § 63.139(e) § 63.143(e) § 63.143(e)(1) § 63.143(g) [G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) [G]§ 63.172(k) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.145(a)(3) [G]§ 63.145(a)(4) § 63.147(b)(2) § 63.147(b)(7) § 63.147(d) § 63.147(d) § 63.147(d) § 63.152(a) [G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(ii) § 63.181(g)(1)(iii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	§ 63.146(b)(7) [G]§ 63.146(b)(7)(i) § 63.146(e) § 63.146(e)(1) [G]§ 63.151(b) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-40-FLARE	CD	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-40-FLARE	CD	60A-1	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
F-40-FLARE	CD	60A-2	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
F-40-FLARE	CD	60A-3	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4)	None	None
F-40-FLARE	CD	61FF	BENZENE	40 CFR Part 61, Subpart FF	§ 61.349(a) § 60.18 § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) § 61.354(c)	For each closed-vent system and control device used to comply with §§61.343-61.348, properly design, install, operate, and maintain the closed-vent system and control device.	§ 60.18(f)(2) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h)	§ 61.354(c) § 61.354(c)(3) § 61.356(f) § 61.356(f)(1) § 61.356(f)(2)(i)(D) § 61.356(h) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(7)	§ 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-40-FLARE	CD	63A-1	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
F-40-FLARE	CD	63A-2	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
F-40-FLARE	CD	63A-3	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-40-FLARE	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.149(a) § 63.11 § 63.139(b) § 63.139(c)(3) § 63.139(f) [G]§ 63.145(j) § 63.172(a) [G]§ 63.172(h) § 63.172(i)	Owner shall comply with the provisions of table 35 of this subpart, for each item of equipment meeting all the criteria specified in (b)-(d) and either paragraph (e)(1) or (e)(2) of this section.	§ 63.139(d)(3) § 63.139(e) § 63.143(e) § 63.143(g) [G]§ 63.145(j) [G]§ 63.172(f)(1) [G]§ 63.172(g) [G]§ 63.172(h) [G]§ 63.172(k) [G]§ 63.172(k) [G]§ 63.172(k) [G]§ 63.172(h) [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.145(a)(3) [G]§ 63.145(a)(4) § 63.147(b)(2) § 63.147(b)(5) § 63.147(d) § 63.147(d) § 63.147(d)(1) [G]§ 63.152(a) [G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g) § 63.181(g)(1)(ii) § 63.181(g)(2) [G]§ 63.181(g)(3)	§ 63.146(b)(7) [G]§ 63.146(b)(7)(i) § 63.146(e) § 63.146(e)(1) [G]§ 63.151(b) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) [G]§ 63.182(a) [G]§ 63.182(c) [G]§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FA-124	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3) § 60.18	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(2) [G]§ 115.117	§ 115.118(a)(5) § 115.118(a)(7)	None
FA-129	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FA-129	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
FGHDR	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121- 10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FGHDR	EP	R5121-2	voc	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121-3	voc	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FGHDR	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121-6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121-7	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FGHDR	EP	R5121-8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FGHDR	EP	R5121-9	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) *** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	\$ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(b) § 115.358(b)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(F) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	discovery, which exceeds a screening concentration	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(3) § 115.352(7) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(4) § 115.352(6) § 115.352(7) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	screening concentration	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2) § 115.352(3) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(1) § 115.357(12) § 115.357(8)	discovery which exceeds a screening concentration	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(1) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(1)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(1)	screening concentration greater than 10,000 parts	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5352- ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	§ 60.482-1(d) § 60.486(k)	Equipment that is in vacuum service is excluded from the requirements of §60.482-2 to §60.482-10, if it is identified as required in §60.486(e)(5).	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-2(b)(1) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-2(a)(2) [G]\$ 60.482-2(c)(1) [G]\$ 60.482-2(c)(2) \$ 60.482-2(d)(1) [G]\$ 60.482-2(d)(1) \$ 60.482-2(d)(2) \$ 60.482-2(d)(3) [G]\$ 60.482-2(d)(5) [G]\$ 60.482-2(d)(5) [G]\$ 60.482-2(d)(6) [G]\$ 60.482-2(g) \$ 60.482-2(g) \$ 60.482-2(g) \$ 60.482-2(g) \$ 60.482-2(g) \$ 60.482-9(g) \$ 60.482-9(d) \$ 60.482-9(d)	If an instrument reading of 10,000 ppm or greater is measured for pumps in light liquid service, a leak is detected.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(f) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60VV- ALL	voc	40 CFR Part 60, Subpart VV	§ 60.482-3(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(1) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-1(c) and paragraphs (h), (i), and (j) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-4(a) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-4(b)(1) \$ 60.482-4(c) \$ 60.482-4(d)(1) \$ 60.482-4(d)(2) \$ 60.482-9(a) \$ 60.482-9(b) \$ 60.486(k)	Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in § 60.485(c).	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	§ 60.482-5(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k)	Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1(c) and paragraph (c) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-6(a)(1) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-6(a)(2) \$ 60.482-6(b) \$ 60.482-6(c) \$ 60.482-6(d) \$ 60.482-6(e) \$ 60.486(k)		§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-7(b) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-7(d)(1) \$ 60.482-7(d)(2) [G]\$ 60.482-7(e) [G]\$ 60.482-7(f) [G]\$ 60.482-7(f) [G]\$ 60.482-7(h) \$ 60.482-9(b) [G]\$ 60.482-9(c) \$ 60.482-9(c) \$ 60.482-9(f) \$ 60.482-9(f) \$ 60.486(k)	If an instrument reading of 10,000 ppm or greater is measured for valves in gas/vapor service and in light liquid service, a leak is detected.	\$ 60.482-1(f)(1) \$ 60.482-1(f)(2) [G]\$ 60.482-1(f)(3) \$ 60.482-7(a)(1) [G]\$ 60.482-7(a)(2) \$ 60.482-7(c)(1)(ii) \$ 60.482-7(c)(2) \$ 60.482-7(c)(2) \$ 60.485(a) [G]\$ 60.485(b) [G]\$ 60.485(c) [G]\$ 60.485(d) [G]\$ 60.485(d) [G]\$ 60.485(d) [G]\$ 60.485(e) \$ 60.485(f)	\$ 60.482-1(g) [G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) [G]\$ 60.486(e)(2) [G]\$ 60.486(e)(4) [G]\$ 60.486(f) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-8(b) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-8(a) \$ 60.482-8(c)(1) \$ 60.482-8(c)(2) \$ 60.482-8(d) \$ 60.482-9(d) \$ 60.482-9(d) \$ 60.482-9(f) \$ 60.482-9(f) \$ 60.486(k)	For pumps in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-8(b) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-8(a) \$ 60.482-8(a)(2) \$ 60.482-8(c)(1) \$ 60.482-8(c)(2) \$ 60.482-8(d) \$ 60.482-9(a) \$ 60.482-9(b) \$ 60.482-9(e) \$ 60.482-9(f) \$ 60.486(k)	For valves in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-8(b) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-8(a) \$ 60.482-8(a)(2) \$ 60.482-8(c)(1) \$ 60.482-8(c)(2) \$ 60.482-8(d) \$ 60.482-9(a) \$ 60.482-9(b) \$ 60.486(k)	For pressure relief devices in light liquid or in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	\$ 60.482-8(b) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-1(g) \$ 60.482-8(a) \$ 60.482-8(a)(2) \$ 60.482-8(c)(1) \$ 60.482-8(c)(2) \$ 60.482-8(d) \$ 60.482-9(a) \$ 60.482-9(b) \$ 60.486(k)	For flanges and other connectors, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUGITIVES	EU	60VV- ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-1(e) § 60.486(k)	Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§ 60.482-2 through 60.482-10 if it is identified as required in §60.486(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section. §60.482-1(e)(1)-(3)	None	§ 60.486 [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	61J-ALL	BENZENE	40 CFR Part 61, Subpart J	§ 61.112(a) § 61.112(b)	Each owner or operator subject to this subpart shall comply with the requirements of 40 CFR 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources).	None	None	None
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	§ 61.242-1(e)	Equipment that is in vacuum service is excluded from the requirements of §61.242-2 to §61.242-11, if it is identified as required in §61.246(e)(5).	None	[G]§ 61.246(e)	None
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-2 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pumps. §61.242-2(a)-(g)	[G]§ 61.242-2 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(h) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-3 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for compressors. §61.242-3(a)-(i)	[G]§ 61.242-3 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(h) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-4 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pressure relief devices in gas/vapor service. §61.242-4(a)-(c)	[G]§ 61.242-4 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-5 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for sampling connection systems. §61.242-5(a)-(c)	[G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-6 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for open-ended valves or lines. §61.242-6(a)-(c)	[G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-7 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10 [G]§ 61.243-1 [G]§ 61.243-2	Comply with standards for valves. §61.242-7(a)-(h)	[G]§ 61.242-7 [G]§ 61.243-1 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(f) [G]§ 61.246(g) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) § 61.247(d) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-8 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pressure relief devices in liquid service. § 61.242-8(a)-(d)	[G]§ 61.242-8 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	§ 61.242-9 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d)	Each product accumulator vessel shall be equipped with a closed-vent system to capture and transport any leakage from the vessel to a control device as in §61.242-11, except in §61.242-1(c).	[G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	61V-ALL	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-8 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for flanges and other connectors. § 61.242-8(a)-(d)	[G]§ 61.242-8 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUGITIVES	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	63UU- ALL	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
GEN6000TK	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPBOIL	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPBOIL	EU	60Db-1	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.104(a)(1) § 60.104	No owner or operator subject to the provisions of this subpart shall burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph.	§ 60.105(a) § 60.105(a)(4) § 60.105(a)(4)(ii) § 60.105(a)(4)(iii) § 60.105(a)(4)(iii) § 60.105(e) § 60.105(e)(3)(ii) § 60.106(a) [G]§ 60.106(e)(1)	§ 60.105(a)(4)	§ 60.105(e) § 60.105(e)(3)(ii) § 60.107(e) § 60.107(f)
GRPBOIL	EU	60Db-1	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOIL	EU	60Db-1	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPBOIL	EU	63DDDD D-01	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
GRPFUR01	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F)  ** See Periodic  Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFUR01	EU	R7201	NO <sub>X</sub>	30 TAC Chapter 117, Subchapter B	§ 117.110(a)(2) § 117.110(a) § 117.110(b) [G]§ 117.110(b)(1) § 117.130(d) § 117.140(k)	atmosphere from any gasfired process heaters with a maximum rated capacity equal to or greater than 40 MMBtu emissions of NO <sub>x</sub> in excess of 0.08 lb/MMBtu of heat input.	[G]§ 117.135(a)(1) § 117.135(a)(4) § 117.135(b) § 117.135(c) § 117.135(d) § 117.135(f) § 117.135(f) § 117.135(f) § 117.135(g) § 117.140(a) § 117.140(b)(1) § 117.140(c)(1) [G]§ 117.140(c)(3) § 117.140(e) § 117.140(e) § 117.8100(a) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(1)(C) § 117.8100(a)(4) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(C) § 117.8100(a)(5)(C) § 117.8100(a)(5)(C) § 117.8100(a)(5)(C) [G]§ 117.8100(a)(6)(C) [G]§ 117.8100(a)(6)(C) [G]§ 117.8100(a)(6)(C) [G]§ 117.8100(a)(6)(C) [G]§ 117.8100(a)(6)(C)	§ 117.145(a) § 117.145(f) § 117.145(f)(1) [G]§ 117.145(f)(2) § 117.145(f)(8) § 117.145(f)(9) § 117.8100(a)(5)(C)	§ 117.135(b) § 117.135(g) [G]§ 117.145(b) [G]§ 117.145(d) § 117.145(d)(1) § 117.145(d)(2) § 117.145(d)(3) § 117.145(d)(4) § 117.145(d)(5) § 117.8010 [G]§ 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8010(8)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFUR01	EU	R7201	СО	30 TAC Chapter 117, Subchapter B	§ 117.110(c)(1) § 117.110(c) § 117.110(c)(1)(A) § 117.110(c)(3)	117.110(c)(3).		§ 117.145(a) § 117.145(f) § 117.145(f)(1) [G]§ 117.145(f)(2) § 117.145(f)(8) § 117.145(f)(9) § 117.8100(a)(5)(C)	\$ 117.135(b) \$ 117.135(g) [G]\$ 117.145(b) [G]\$ 117.145(c) \$ 117.145(d)(1) \$ 117.145(d)(2) \$ 117.145(d)(3) \$ 117.145(d)(4) \$ 117.145(d)(5) \$ 117.145(d)(5) \$ 117.8010 [G]\$ 117.8010(2) \$ 117.8010(2)(A) \$ 117.8010(2)(B) [G]\$ 117.8010(3) \$ 117.8010(4) [G]\$ 117.8010(5) \$ 117.8010(6) [G]\$ 117.8010(7) [G]\$ 117.8010(7) [G]\$ 117.8010(8) \$ 117.8100(c)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFUR01	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
GRPFUR02	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPFUR02	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
GRPFUR03	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F)  ** See Periodic Monitoring Summary	None	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPSMLTK1	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
J-3	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)
J-4	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(c) § 63.6645(f)
PROCU1544	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PROCU1740	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
PROCU1741	PRO	63F	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
RADTWREN G2	EU	601111	СО	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
RADTWREN G2	EU	601111	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 75 KW and a displacement of less than 10 liters per cylinder and is a 2008 model year and later, must comply with an NMHC+NOx emission limit of 4.7 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
RADTWREN G2	EU	601111	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3).	None	None	[G]§ 60.4214(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
RADTWREN G2	EU	60IIII	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 75 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.40 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
RADTWREN G2	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

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REGVLD	EU	R5121-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land- based operations). All land- based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
REGVLD	EU	R5121-2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
SWPUMPEN G	EU	63ZZZZ- 1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602- Table2c.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(i) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
T-2000	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(a)(3) § 115.131(a)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(a) of this title.	[G]§ 115.135(a) § 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4) ** See CAM Summary	§ 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4)	None

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T-2000	EU	R5131-2	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(a)(3) § 115.131(a)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(a) of this title.	[G]§ 115.135(a) § 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4) ** See CAM Summary	§ 115.136(a)(2) § 115.136(a)(3) § 115.136(a)(4)	None
T-2000	EU	61FF-1	BENZENE	40 CFR Part 61, Subpart FF	\$ 61.347(a)(1) \$ 60.18 \$ 61.347(a)(1)(i)(A) \$ 61.347(a)(1)(i)(B) \$ 61.347(b) \$ 61.347(c) \$ 61.349(a) \$ 61.349(a)(1)(ii) \$ 61.349(a)(1)(iii) \$ 61.349(a)(1)(iv) \$ 61.349(b) \$ 61.349(e) \$ 61.349(f) \$ 61.349(g)	Install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.	§ 60.18(f)(2) § 61.347(a)(1)(i)(A) § 61.347(b) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h)	§ 61.354(c) § 61.354(c)(3) § 61.356(d) § 61.356(f) § 61.356(f)(1) § 61.356(g) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(2) § 61.356(j)(7)	§ 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F)
T-2000	EU	61FF-2	BENZENE	40 CFR Part 61, Subpart FF	§ 61.347(a)(1) § 60.18 § 61.347(a)(1)(i)(A) § 61.347(b) § 61.347(c) § 61.347(c) § 61.349(a) § 61.349(a)(1)(ii) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(b) § 61.349(b) § 61.349(f) § 61.349(g)	Install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.	§ 60.18(f)(2) § 61.347(a)(1)(i)(A) § 61.347(b) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h)	§ 61.354(c) § 61.354(c)(3) § 61.356(d) § 61.356(f) § 61.356(f)(1) § 61.356(g) § 61.356(j) § 61.356(j) § 61.356(j)(2) § 61.356(j)(2) § 61.356(j)(7)	§ 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F)

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T-2158	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-2158	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
T-2176	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-2176	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY

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T-2177	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-2177	EU	63YY	112(B) HAPS	40 CFR Part 63, Subpart YY	§ 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY
T-301	EP	60NNN- 22	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e)	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)
T-301	EP	60NNN- 23	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e)	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)

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T-302	EP	60NNN- 22	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e)	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)
T-302	EP	60NNN- 23	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(b) § 60.18	Each affected facility shall combust the emissions in a flare that meets the requirements of § 60.18.	§ 60.663(b) § 60.663(b)(1) § 60.663(b)(2) § 60.664(a) § 60.664(d) [G]§ 60.664(e)	§ 60.663(b)(2) § 60.665(b) § 60.665(b)(3) § 60.665(d) § 60.665(f)	§ 60.665(a) § 60.665(b) § 60.665(b)(3) § 60.665(k) § 60.665(l) § 60.665(l)(2) § 60.665(l)(4)
T-502	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-800	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
T-800	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(b) § 63.119(a)(1) [G]§ 63.119(b)(2) § 63.119(b)(3)(ii) § 63.119(b)(5)(ii) § 63.119(b)(5)(ii) § 63.119(b)(5)(iii) § 63.119(b)(5)(iii) § 63.119(b)(5)(v) § 63.119(b)(5)(vi) § 63.119(b)(5)(vii) § 63.119(b)(5)(viii) § 63.119(b)(5)(viii) § 63.119(b)(6)(viii) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7)	Tanks using a fixed roof and an internal floating roof (defined in §63.111) to comply with §63.119(a)(1) must comply with: §63.119(b)(1)-(6).	§ 63.120(a)(2)(i) § 63.120(a)(2)(ii)	§ 63.120(a)(4) § 63.123(a) § 63.123(c) § 63.123(g) [G]§ 63.152(a)	§ 63.120(a)(5) § 63.120(a)(6) § 63.122(d) § 63.122(d)(1)(iii) § 63.122(d)(2)(iii) § 63.122(d)(2)(iii) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(b) [G]§ 63.152(b) [G]§ 63.152(b) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(iii)
T-809	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-815	EU	R5112-1	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

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T-815	EU	63G-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(b) § 63.119(a)(1) [G]§ 63.119(b)(2) § 63.119(b)(3)(ii) § 63.119(b)(5)(i) § 63.119(b)(5)(ii) § 63.119(b)(5)(iii) § 63.119(b)(5)(iii) § 63.119(b)(5)(v) § 63.119(b)(5)(vi) § 63.119(b)(5)(vii) § 63.119(b)(5)(viii) [G]§ 63.119(b)(5)(viii) § 63.119(b)(6) § 63.120(a)(4) § 63.120(a)(7)	Tanks using a fixed roof and an internal floating roof (defined in §63.111) to comply with §63.119(a)(1) must comply with: §63.119(b)(1)-(6).	§ 63.120(a)(2)(i) § 63.120(a)(2)(ii)	§ 63.120(a)(4) § 63.123(a) § 63.123(c) § 63.123(g) [G]§ 63.152(a)	§ 63.120(a)(5) § 63.120(a)(6) § 63.122(d) § 63.122(d)(1)(iii) § 63.122(d)(1)(iii) § 63.122(d)(2)(ii) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(1) § 63.152(c)(1)
T-816	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-816	EU	60Kb-1	VOC	40 CFR Part 60, Subpart Kb	\$ 60.112b(a)(1) \$ 60.112b(a)(1)(i) \$ 60.112b(a)(1)(ii)(C) \$ 60.112b(a)(1)(iii) \$ 60.112b(a)(1)(iv) \$ 60.112b(a)(1)(ix) \$ 60.112b(a)(1)(v) \$ 60.112b(a)(1)(vi) \$ 60.112b(a)(1)(vii) \$ 60.112b(a)(1)(viii)	with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
T-822	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
T-822	EU	60Kb-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
T-834	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
T-834	EU	60Kb	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(ii) § 60.112b(a)(1)(iii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
T-DIES-ETH- A	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-DIES-ETH- B	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-FB-203	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-6800	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK-6810	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C13125	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38341	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38342	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38343	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK-C38344	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38417	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38418	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-C38419	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TK-FA214XR	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK-N80120	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
V-309	EU	R5142-1	VOC	30 TAC Chapter 115, Industrial Wastewater	§ 115.142(1) § 115.142 § 115.142(1)(A) § 115.142(1)(B) § 115.142(1)(C) § 115.142(1)(E) § 115.142(1)(G) [G]§ 115.142(1)(H) [G]§ 115.148 § 60.18(b)	The wastewater component shall meet the specified control requirements.	[G]§ 115.142(1)(H) [G]§ 115.144(1) § 115.144(3)(E) § 115.144(5) § 115.145(1) § 115.145(10) [G]§ 115.145(2) [G]§ 115.145(3) § 115.145(5) § 115.145(6) § 115.145(7) § 115.145(9) [G]§ 115.148 ** See CAM Summary	[G]§ 115.142(1)(H) § 115.146(1) § 115.146(2) § 115.146(3) § 115.146(4)	None
V-309	EU	R5142-2	VOC	30 TAC Chapter 115, Industrial Wastewater	§ 115.142(1) § 115.142 § 115.142(1)(A) § 115.142(1)(B) § 115.142(1)(C) § 115.142(1)(E) § 115.142(1)(G) [G]§ 115.142(1)(H) [G]§ 115.148 § 60.18(b)	The wastewater component shall meet the specified control requirements.	[G]§ 115.142(1)(H) [G]§ 115.144(1) § 115.144(3)(E) § 115.145(5) § 115.145(1) § 115.145(10) [G]§ 115.145(2) [G]§ 115.145(3) § 115.145(4) § 115.145(5) § 115.145(6) § 115.145(7) § 115.145(9) [G]§ 115.148 ** See CAM Summary	[G]§ 115.142(1)(H) § 115.146(1) § 115.146(2) § 115.146(3) § 115.146(4)	None

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
V-5400	EP	60RRR-1	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.702(b) § 60.18	For each vent stream, combust the emissions in a flare that meets the requirements of §60.18.	§ 60.703(b) § 60.703(b)(1) § 60.704(a) § 60.704(c) [G]§ 60.704(d)	§ 60.705(b) § 60.705(b)(3) § 60.705(e) § 60.705(s)	§ 60.705(a) § 60.705(b) § 60.705(b)(3) § 60.705(k) § 60.705(l) § 60.705(l)(3) § 60.705(s)
V-5400	EP	60RRR-2	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.702(b) § 60.18	For each vent stream, combust the emissions in a flare that meets the requirements of §60.18.	§ 60.703(b) § 60.703(b)(1) § 60.704(a) § 60.704(c) [G]§ 60.704(d)	§ 60.705(b) § 60.705(b)(3) § 60.705(e) § 60.705(s)	§ 60.705(a) § 60.705(b) § 60.705(b)(3) § 60.705(k) § 60.705(l) § 60.705(l)(3) § 60.705(s)
XV-9	EU	R5112	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3) § 60.18	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(2) [G]§ 115.117	§ 115.118(a)(5) § 115.118(a)(7)	None
XV-9	EU	60Kb-2	voc	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3) § 60.18	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	§ 60.113b(d) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b)	§ 60.115b § 60.115b(d)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b § 60.115b(d)(1) § 60.115b(d)(3)

# **Additional Monitoring Requirements**

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Unit/Group/Process Information						
ID No.: E-17-HDR						
Control Device ID No.: F-17-FLARE Control Device Type: Flare						
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1					
Pollutant: VOC Main Standard: § 115.122(a)(1)						
Monitoring Information						
Indicator: Pilot Flame						

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information						
ID No.: E-17-HDR						
Control Device ID No.: F-17-FLARE Control Device Type: Flare						
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2					
Pollutant: VOC	Main Standard: § 115.122(a)(2)					
Monitoring Information						
Indicator: Pilot Flame						
Minimum Frequency: Continuous						

Averaging Period: n/a

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information	
ID No.: E-24-HDR	

Control Device ID No.: E-24-FLARE Control Device Type: Flare

**Applicable Regulatory Requirement** 

Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-1

Pollutant: VOC Main Standard: § 115.122(a)(1)

**Monitoring Information** 

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information							
ID No.: E-24-HDR							
Control Device ID No.: E-24-FLARE Control Device Type: Flare							
Applicable Regulatory Requirement							
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2						
Pollutant: VOC	Main Standard: § 115.122(a)(2)						
Monitoring Information							
Indicator: Pilot Flame							
Minimum Frequency: Continuous	Minimum Frequency: Continuous						
Averaging Period: n/a							

CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information						
ID No.: E-40-HDR						
Control Device ID No.: F-40-FLARE Control Device Type: Flare						
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1					
Pollutant: VOC	Main Standard: § 115.122(a)(1)					
Monitoring Information						
Indicator: Pilot Flame						
Minimum Frequency: Continuous						
Averaging Period: n/a						

CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information					
ID No.: E-40-HDR					
Control Device ID No.: F-40-FLARE Control Device Type: Flare					
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2				
Pollutant: VOC	Main Standard: § 115.122(a)(2)				

#### **Monitoring Information**

Indicator: Pilot Flame

Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information							
ID No.: FGHDR	ID No.: FGHDR						
		ontrol Device Type: Steam Generating Unit (Boiler)/rocess Heater (Design heat input is greater than or equal 44MW)					
Applicable Regulatory Requirement							
Name: 30 TAC Chapter 115, Vent Gas Cor	SOP Index No.: R5121-1						
Pollutant: VOC		Main Standard: § 115.122(a)(1)					
Monitoring Information							
Indicator: Period of Operation							
Minimum Frequency: n/a							
Averaging Period: n/a							
Deviation Limit: Any period of operation that is not recorded							
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.							

Unit/Group/Process Information					
ID No.: FGHDR					
Control Device ID No.: BA-113	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is greater than or equal to 44MW)				
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 115, Vent Gas Cor	SOP Index No.: R5121-10				
Pollutant: VOC		Main Standard: § 115.122(a)(2)			
Monitoring Information					
Indicator: Period of Operation					
Minimum Frequency: n/a					
Averaging Period: n/a					
Deviation Limit: Any period of operation that is not recorded					
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.					

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPBOIL	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is greater than or equal to 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	ontrols SOP Index No.: R5121-2	
Pollutant: VOC	Main Standard: § 115.122(a)(2)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPFUR01	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is less than 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	ntrols	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.122(a)(1)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPFUR01	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is less than 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	Gas Controls SOP Index No.: R5121-4	
Pollutant: VOC	Main Standard: § 115.122(a)(2)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPFUR02	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is greater than or equal to 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	ne: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-5	
Pollutant: VOC Main Standard: § 115.122(a)(1)		Main Standard: § 115.122(a)(1)
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPFUR02	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is greater than or equal to 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-6	
Pollutant: VOC		Main Standard: § 115.122(a)(2)
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: GRPFUR03	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is less than 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-7	
Pollutant: VOC	Main Standard: § 115.122(a)(1)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information			
ID No.: FGHDR			
Control Device ID No.: GRPFUR03	Control Device Type: Steam Generating Unit (Boiler)/ Process Heater (Design heat input is less than 44MW)		
Applicable Regulatory Requirement			
Name: 30 TAC Chapter 115, Vent Gas Cor	Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-8		
Pollutant: VOC	OC Main Standard: § 115.122(a)(2)		
Monitoring Information			
Indicator: Period of Operation			
Minimum Frequency: n/a			
Averaging Period: n/a			
Deviation Limit: Any period of operation that is not recorded			
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.			

Unit/Group/Process Information		
ID No.: FGHDR		
Control Device ID No.: BA-113		Type: Steam Generating Unit (Boiler)/ (Design heat input is greater than or equal
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Cor	as Controls SOP Index No.: R5121-9	
Pollutant: VOC	Main Standard: § 115.122(a)(1)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Any period of operation that is not recorded		
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.		

Unit/Group/Process Information		
ID No.: T-2000		
Control Device ID No.: F-40-FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-1	
Pollutant: VOC	Main Standard: § 115.132(a)(3)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		
Deviation Limit: No pilot flame when waste gas is routed to the flare.		

Unit/Group/Process Information		
ID No.: T-2000		
Control Device ID No.: F-17-FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-2	
Pollutant: VOC	Main Standard: § 115.132(a)(3)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information		
ID No.: V-309		
Control Device ID No.: F-40-FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-1	
Pollutant: VOC	Main Standard: § 115.142(1)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		

Averaging Period: n/a

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information		
ID No.: V-309		
Control Device ID No.: F-17-FLARE	Control Device Type: Flare	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-2	
Pollutant: VOC	Main Standard: § 115.142(1)	
Monitoring Information		
Indicator: Pilot Flame		
Minimum Frequency: Continuous		
Averaging Period: n/a		

Deviation Limit: No pilot flame when waste gas is routed to the flare.

Unit/Group/Process Information		
ID No.: DEG1		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412(1)	
Pollutant: VOC	Main Standard: § 115.412(1)	
Monitoring Information		
Indicator: Visual Inspection		
Minimum Frequency: Monthly		
Averaging Period: n/a		
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC § 115.412(1) (A)-(F).		

Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.

Unit/Group/Process Information		
ID No.: E-01A-1544		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
ame: 30 TAC Chapter 111, Visible Emissions SOP Index No.: R1111		
ollutant: PM (OPACITY)  Main Standard: § 111.111(a)(1)(A)		
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fuel is used		
Averaging Period: n/a		
Deviation Limit: During the firing of an alternate fuel, the presence of visible emission or an opacity		

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be

reported as a deviation.

greater than 30% averaged over a six minute period

Unit/Group/Process Information		
ID No.: GRPBOIL		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111	
Pollutant: Opacity Main Standard: § 111.111(a)(1)(0		
Monitoring Information		
Indicator: Visible Emissions		
Minimum Frequency: once per week		
Averaging Period: n/a		
Deviation Limit: 15% Opacity		

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.

Unit/Group/Process Information		
ID No.: GRPFUR01		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111	
Pollutant: Opacity Main Standard: § 111.111(a)(1)(A)		
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fuel is used		
Averaging Period: n/a		

Deviation Limit: During the firing of an alternate fuel, the presence of visible emission or an opacity greater than 30% averaged over a six minute period

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

Unit/Group/Process Information	
ID No.: GRPFUR02	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity Main Standard: § 111.111(a)(1)(B)	
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	

Deviation Limit: Opacity greater than 20% averaged over a six minute period

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

Unit/Group/Process Information		
ID No.: GRPFUR03		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)	
Monitoring Information		
Indicator: Visible Emissions		
Minimum Frequency: Once per week		
Averaging Period: n/a		

Deviation Limit: Opacity greater than 30% averaged over a six minute period

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions.

If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.

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	Unit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
ADMINGEN	N/A	30 TAC Chapter 117, Subchapter B	Stationary internal combustion engine with less than 300 hp
AIRJAM1	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
AIRJAM2	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
BA-113	N/A	40 CFR Part 60, Subpart Db	Unit constructed prior to 06/19/1984, and has not been reconstructed or modified since 06/19/1984
BOILERGEN	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
BOILERSW	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
CONTROLRM	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
E-10-1544	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after 11/15/1992
E-11-1544	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
E-11-1544	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE manufactured before 04/01/2006
E-137-CT	N/A	40 CFR Part 63, Subpart Q	Unit does not operate with chromium-based water treatment chemicals on or after 09/08/1994 and is not a major source or an integral part of a major source
E-294-CT	N/A	40 CFR Part 63, Subpart Q	Unit does not operate with chromium-based water treatment chemicals on or after 09/08/1994 and is not a major source or an integral part of a major source

	Unit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FA-123	N/A	30 TAC Chapter 115, Water Separation	Does not meet definition of a VOC water separator.
FA-123	N/A	40 CFR Part 61, Subpart FF	Unit does not store, treat, or manage a material that meets the definition of waste under 61.341.
FA-124	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
FA-131	N/A	40 CFR Part 61, Subpart FF	Unit does not store, treat, or manage a material that meets the definition of waste under 61.341.
FA-403C	N/A	40 CFR Part 60, Subpart RRR	Reactor process constructed before 06/29/1990 and does not have a direct or indirect vent stream to atmosphere
FA-403D	N/A	40 CFR Part 60, Subpart RRR	Reactor process constructed before 06/29/1990 and does not have a direct or indirect vent to the atmosphere
FA-408A	N/A	40 CFR Part 60, Subpart RRR	Reactor commenced construction before 06/29/1990
FA-408B	N/A	40 CFR Part 60, Subpart RRR	Reactor commenced construction before 06/29/1990
FA-423A	N/A	40 CFR Part 60, Subpart RRR	Reactor commenced construction before 06/29/1990
FA-423B	N/A	40 CFR Part 60, Subpart RRR	Reactor commenced construction before 06/29/1990
FA-429	N/A	30 TAC Chapter 115, Storage of VOCs	Storage vessel is no more than 1000 gallons in capacity
FA-429	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
FA-429	N/A	40 CFR Part 63, Subpart YY	Storage vessel is in the ethylene production source category and does not store organic HAPs other than as impurities
F-N1-VDU	N/A	30 TAC Chapter 117, Subchapter B	Incinerator exempt from the requirements of 30 TAC Chapter 117.

l	Jnit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GEN6000TK	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
GRPFUR01	BA-101, BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, BA-108, BA-109, BA-110, BA-111, BA-112	40 CFR Part 63, Subpart DDDDD	An ethylene cracking furnace covered by MACT YY
GRPFUR02	BA-115, BA-116, BA-117, BA-118	30 TAC Chapter 117, Subchapter B	New unit placed into service after 11/15/1992
GRPFUR02	BA-115, BA-116, BA-117, BA-118	40 CFR Part 63, Subpart DDDDD	An ethylene cracking furnace covered by MACT YY
GRPFUR03	BA-301, BA-401	30 TAC Chapter 117, Subchapter B	Industrial process heater with maximum rated capacity < 40 MMBTU/hr
GRPSMLTK1	P6710TNK, TK-3, TK-4, TK-500339, TK-C13119, TK-C13120, TK-C13126, TK-C13129, TK-C13130, TK-FA-235, TK-FA-310X, TK-FA-311X, TK-FA-312X, TK-FA-440AX, TK-FA-440BX, TK-FA-505X, TK-FA-506X, TK-FA606X, TK-FA609X, TK-FB-304, TK-M12, TK-N78920, TK-N78921, TK-N80118, TK-N80119	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters.
J-3	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
J-3	N/A	40 CFR Part 60, Subpart IIII	Emergency fire pump CI ICE manufactured before 07/01/2006.
J-4	N/A	30 TAC Chapter 117, Subchapter B	Engine was placed into service after November 15, 1992, and is not a functionally identical replacement for an existing unit.
J-4	N/A	40 CFR Part 60, Subpart IIII	Emergency fire pump CI ICE manufactured before 07/01/2006.

U	Init/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
MARINELD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Marine vessel loading operation is in an area other than the Houston/Galveston area
MARINELD	N/A	40 CFR Part 63, Subpart G	Does not meet the applicability criteria for a loading rack as specified in § 63.100(h)
MARINELD	N/A	40 CFR Part 63, Subpart YY	Definition of Transfer rack includes only filling of bulk cargo tanks mounted on or in a truck or railcar, and therefore does not include marine vessel loading operations.
RADTWRENG2	N/A	30 TAC Chapter 117, Subchapter B	Stationary internal combustion engine with less than 300 hp
SWPUMPENG	N/A	30 TAC Chapter 117, Subchapter B	Stationary internal combustion engine with less than 300 hp
SWPUMPENG	N/A	40 CFR Part 60, Subpart IIII	Stationary CI ICE that commenced construction before 07/11/2005 and was manufactured before 04/01/2006
T-2158	N/A	40 CFR Part 60, Subpart Kb	A storage vessel that is also subject to the provisions of NSPS Kb is required to comply only with the provisions of MACT YY
T-2176	N/A	40 CFR Part 60, Subpart Kb	A storage vessel that is also subject to the provisions of NSPS Kb is required to comply only with the provisions of MACT YY
T-2177	N/A	40 CFR Part 60, Subpart Kb	A storage vessel that is also subject to the provisions of NSPS Kb is required to comply only with the provisions of MACT YY
T-500	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity less than 25,000 gallons located at a motor vehicle fuel dispensing facility.
T-500	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters.
T-500LD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Loading/unloading occurs at a motor vehicle fuel dispensing facility

	Unit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-502	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters.
T-502LD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Loading/unloading occurs at a motor vehicle fuel dispensing facility
T-5500	N/A	40 CFR Part 60, Subpart NNN	Overlap provisions require compliance with MACT G only. The vent stream is routed to a MACT G Group 1 process vent (E-40-HDR).
T-800	N/A	40 CFR Part 60, Subpart Kb	A Group 1 or Group 2 storage vessel that is also subject to the provisions of NSPS Kb is required to comply only with the provisions of MACT G
T-809	N/A	40 CFR Part 63, Subpart G	Does not meet the definition of storage vessel because the vessel stores organic liquids that may contain organic hazardous air pollutants only as impurities.
T-815	N/A	40 CFR Part 60, Subpart Kb	A Group 1 or Group 2 storage vessel that is also subject to the provisions of NSPS Kb is required to comply only with the provisions of MACT G
T-816	N/A	40 CFR Part 63, Subpart G	Does not meet the definition of storage vessel because the vessel stores organic liquids that may contain organic hazardous air pollutants only as impurities.
T-822	N/A	40 CFR Part 63, Subpart G	Does not meet the definition of storage vessel because the vessel stores organic liquids that may contain organic hazardous air pollutants only as impurities.
T-DIES-ETH-A	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
T-DIES-ETH-B	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
T-FB-203	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-FB-203	N/A	40 CFR Part 63, Subpart YY	Storage vessel in the ethylene production source category and storing material with vapor pressure less than 3.4 kPa
TK-2194	N/A	40 CFR Part 60, Subpart Kb	Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
TK-2194	N/A	40 CFR Part 63, Subpart YY	Pressure vessel in ethylene production source category designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere
TK-2195	N/A	40 CFR Part 60, Subpart Kb	Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere
TK-2195	N/A	40 CFR Part 63, Subpart YY	Pressure vessel in ethylene production source category designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere
TK-C13125	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38341	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38342	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38343	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38344	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38417	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38418	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-C38419	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-FA214XR	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TK-FA214XR	N/A	40 CFR Part 63, Subpart YY	Vessel in the ethylene production source category and storing organic liquids that contain organic HAP only as impurities
TK-FA-215X	N/A	30 TAC Chapter 115, Storage of VOCs	Storage vessel is no more than 1000 gallons in capacity
TK-FA-215X	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-FA-215X	N/A	40 CFR Part 63, Subpart YY	Vessel in the ethylene production source category and storing organic liquids that contain organic HAP only as impurities
TK-J-3	N/A	30 TAC Chapter 115, Storage of VOCs	Storage vessel is no more than 1000 gallons in capacity
TK-J-3	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-J-4	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters
TK-N80120	N/A	40 CFR Part 60, Subpart Kb	Capacity is less than 75 cubic meters.
V-5110	N/A	40 CFR Part 60, Subpart NNN	Overlap provisions require compliance with MACT G only. The vent stream is routed to a MACT G Group 1 process vent (E-40-HDR).
XV-9	N/A	40 CFR Part 63, Subpart YY	Vessel located at an ethylene production unit but does not contain organic HAPs

#### **New Source Review Authorization References**

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#### **New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits				
PSD Permit No.: PSDTX1248	Issuance Date: 01/09/2017			
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 103765	Issuance Date: 11/19/2014			
Authorization No.: 21101	Issuance Date: 01/09/2017			
Permits By Rule (30 TAC Chapter 106) for the	Application Area			
Number: 106.183	Version No./Date: 09/04/2000			
Number: 106.261	Version No./Date: 11/01/2003			
Number: 106.262	Version No./Date: 11/01/2003			
Number: 106.263	Version No./Date: 11/01/2001			
Number: 106.264	Version No./Date: 09/04/2000			
Number: 106.265	Version No./Date: 09/04/2000			
Number: 106.355	Version No./Date: 11/01/2001			
Number: 106.371	Version No./Date: 09/04/2000			
Number: 106.373	Version No./Date: 09/04/2000			
Number: 106.412	Version No./Date: 09/04/2000			
Number: 106.433	Version No./Date: 09/04/2000			
Number: 106.452	Version No./Date: 09/04/2000			
Number: 106.472	Version No./Date: 09/04/2000			
Number: 106.473	Version No./Date: 09/04/2000			
Number: 106.475	Version No./Date: 09/04/2000			
Number: 106.476	Version No./Date: 09/04/2000			
Number: 106.478	Version No./Date: 09/04/2000			
Number: 106.492	Version No./Date: 09/04/2000			
Number: 106.511	Version No./Date: 03/14/1997			
Number: 106.511	Version No./Date: 09/04/2000			
Number: 106.512	Version No./Date: 06/13/2001			
Number: 106.533	Version No./Date: 07/04/2004			
Number: 5	Version No./Date: 05/04/1994			

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
ADMINGEN	EMERGENCY GENERATOR FOR ADMIN BUILDING	106.511/03/14/1997
AIRJAM1	AIR JAMMER	106.512/06/13/2001
AIRJAM2	AIR JAMMER	106.512/06/13/2001
B6100	BOILER NO. 1	103765
B6200	BOILER NO. 2	103765
B6300	BOILER NO. 3	103765
BA-101	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-102	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-103	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-104	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-105	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-106	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-107	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-108	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-109	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-110	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-111	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-112	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-113	STEAM SUPERHEATER	21101, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
BA-115	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-116	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-117	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-118	ETHANE/PROPANE CRACKING FURNACE	21101, PSDTX1248
BA-301	DRYER REGENERATION HEATER	21101, PSDTX1248
BA-401	CONVERTER REGENERATION HEATER	21101, PSDTX1248
BOILERGEN	GENERATOR FOR BOILERS	106.511/09/04/2000
BOILERSW	STORMWATER PUMP FOR BOILERS	106.511/09/04/2000
CONTROLRM	GENERATOR FOR CONTROL ROOM	106.511/09/04/2000
DA-408	SECONDARY DEMETHANIZER COLUMN	21101, PSDTX1248
DA-409	SECONDARY DEMETHANIZER FEED CONTACT TOWER	21101, PSDTX1248
DEG1	DEGREASER NO. 1	21101, PSDTX1248
E-01A-1544	ECONOMIZER STACK FOR BA-101 TO BA-113	21101, PSDTX1248
E-10-1544	PRIMARY DIESEL ENGINE STACK	21101, PSDTX1248
E-11-1544	SECONDARY DIESEL ENGINE STACK	21101, PSDTX1248
E-137-CT	COOLING TOWER 137	21101, PSDTX1248
E-17-HDR	PROCESS VENT TO CONTROL	21101, PSDTX1248
E-24-FLARE	FLARE NO. 24	21101, 106.261/11/01/2003, PSDTX1248
E-24-HDR	PROCESS VENT TO CONTROL	21101, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E-294-CT	COOLING TOWER	21101, PSDTX1248
E-40-HDR	PROCESS VENT TO CONTROL	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
EUCATSTACK	SILENCER STACK	21101, PSDTX1248
F-17-FLARE	FLARE NO. 17	21101, PSDTX1248
F-40-FLARE	FLARE NO. 40	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
F-N1-VDU	VDU N1	21101, PSDTX1248
FA-123	QUENCH WATER SETTLER VOC/WATER SEPARATOR	21101, PSDTX1248
FA-124	DMS HOLDING TANK	21101, PSDTX1248
FA-129	DECOKE DRUM FOR SWEC HEATERS	21101, PSDTX1248
FA-131	DE-OILING SETTLER VOC/WATER SEPARATOR	21101
FA-403C	ACETYLENE CONVERTER	21101, PSDTX1248
FA-403D	ACETYLENE CONVERTER	21101, PSDTX1248
FA-408A	COS/ARSINE REMOVAL UNIT	21101, PSDTX1248
FA-408B	COS/ARSINE REMOVAL UNIT	21101, PSDTX1248
FA-423A	COS/ARSINE REMOVAL DRUM	21101, PSDTX1248
FA-423B	COS/ARSINE REMOVAL DRUM	21101, PSDTX1248
FA-429	METHANOL METERING TANK	21101, PSDTX1248
FGHDR	PROCESS VENT TO CONTROL	21101, 106.261/11/01/2003, PSDTX1248
FUGITIVES	SITEWIDE FUGITIVES	103765, 21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
GEN6000TK	STORAGE VESSEL	106.473/09/04/2000
J-3	EMERGENCY FIRE WATER PUMP ENGINE	21101, PSDTX1248
J-4	EMERGENCY FIRE WATER PUMP ENGINE	21101, PSDTX1248
MARINELD	MARINE VESSEL LOADING	21101, PSDTX1248
P6710TNK	STORAGE VESSEL	106.478/09/04/2000
PROCU1544	ETHYLENE UNIT PROCESS	21101, PSDTX1248
PROCU1740	CUMENE FEED PREP UNIT PROCESS	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
PROCU1741	CYCLOHEXANE UNIT 1741	21101, PSDTX1248
RADTWRENG2	RADIO TOWER EMERGENCY ENGINE	106.511/09/04/2000
REGVLD	SITEWIDE	106.472/09/04/2000, 106.473/09/04/2000
SWPUMPENG	STORMWATER PUMP ENGINE	5/05/04/1994
T-2000	WASH WATER TOWER	21101, PSDTX1248
T-2158	FLEX STORAGE TANK	21101, PSDTX1248
T-2176	FLEX STORAGE TANK	21101, PSDTX1248
T-2177	FLEX STORAGE TANK	21101, PSDTX1248
T-301	DE-ETHANIZER COLUMN	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
T-302	DE-PROPANIZER COLUMN	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
T-500	GASOLINE STORAGE TANK	21101, PSDTX1248
T-500LD	GASOLINE LOADING	21101, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-502	DIESEL STORAGE TANK	21101, PSDTX1248
T-502LD	DIESEL LOADING	21101, PSDTX1248
T-5500	STABILIZER COLUMN	21101, PSDTX1248
T-800	BENZENE STORAGE TANK	21101, PSDTX1248
T-809	OFFTEST CYCLOHEXANE STORAGE TANK	21101, PSDTX1248
T-815	BENZENE FEED TANK	21101, PSDTX1248
T-816	CYCLOHEXANE TANK	21101, PSDTX1248
T-822	CYCLOHEXANE TANK	21101, PSDTX1248
T-834	OFFTEST CYCLOHEXANE STORAGE TANK	106.478/09/04/2000
T-DIES-ETH-A	DIESEL FUEL FOR ETHYLENE UNIT	106.412/09/04/2000
T-DIES-ETH-B	DIESEL FUEL FOR ETHYLENE UNIT	106.412/09/04/2000
T-FB-203	WASH OIL TANK	21101, PSDTX1248
TK-2194	BDFS STORAGE TANK	21101, PSDTX1248
TK-2195	BDFS STORAGE TANK	21101, PSDTX1248
TK-3	LUBE OIL STORAGE TANK	106.472/09/04/2000
TK-4	LUBE OIL STORAGE TANK	106.472/09/04/2000
TK-500339	STORAGE VESSEL	106.478/09/04/2000
TK-6800	STORAGE VESSEL	106.478/09/04/2000
TK-6810	STORAGE VESSEL	106.478/09/04/2000

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-C13119	STORAGE TANK TK-C13119	106.472/09/04/2000
TK-C13120	STORAGE TANK TK-C13120	21101, PSDTX1248
TK-C13125	STORAGE TANK TK-C13125	106.472/09/04/2000
TK-C13126	STORAGE TANK TK-C13126	21101, PSDTX1248
TK-C13129	STORAGE TANK TK-C13129	106.472/09/04/2000
TK-C13130	STORAGE TANK TK-C13130	21101, PSDTX1248
TK-C38341	STORAGE VESSEL	106.478/09/04/2000
TK-C38342	STORAGE VESSEL	106.478/09/04/2000
TK-C38343	STORAGE VESSEL	106.478/09/04/2000
TK-C38344	STORAGE VESSEL	106.478/09/04/2000
TK-C38417	STORAGE VESSEL	106.478/09/04/2000
TK-C38418	STORAGE VESSEL	106.478/09/04/2000
TK-C38419	STORAGE VESSEL	106.478/09/04/2000
TK-FA214XR	GB-201 LUBE OIL RESERVOIR	21101, PSDTX1248
TK-FA-215X	GB-210 SEAL OIL RESERVOIR	21101, PSDTX1248
TK-FA-235	GB-201 SEAL OIL DEGASSING TANK	21101, PSDTX1248
TK-FA-310X	GB-302 LUBE OIL RESERVOIR	21101, PSDTX1248
TK-FA-311X	GB-302 CASING SEAL OIL RESERVOIR	21101, PSDTX1248
TK-FA-312X	GB-304/305 TURBINE OIL RESERVOIR	21101, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-FA-440AX	GA-404 LUBE OIL RESERVE	21101, PSDTX1248
TK-FA-440BX	GA-404S LUBE OIL RESERVOIR	21101, PSDTX1248
TK-FA-505X	GB-501 SEAL OIL TANK	21101, PSDTX1248
TK-FA-506X	GB-501 LUBE OIL RESERVOIR	21101, PSDTX1248
TK-FA605X	GB-601 SEAL OIL TANK	21101, PSDTX1248
TK-FA606X	GB-601 SEAL OIL TANK	21101, PSDTX1248
TK-FA609X	GB-601 RUNDOWN TANK	21101, PSDTX1248
TK-FB-304	GB-304-305 LUBE OIL STORAGE TANK	21101, PSDTX1248
TK-J-3	DIESEL TANK FOR THE FIREWATER PUMP ENGINER J3	21101, PSDTX1248
TK-J-4	DIESEL TANK FOR THE FIREWATER PUMP ENGINER J4	21101, PSDTX1248
TK-M12	LUBE OIL STORAGE TANK	106.472/09/04/2000
TK-N78920	STORAGE TANK N78920	21101, PSDTX1248
TK-N78921	STORAGE TANK N78921	21101, PSDTX1248
TK-N80118	STORAGE TANK N-80118	21101, PSDTX1248
TK-N80119	STORAGE TANK N80119	21101, PSDTX1248
TK-N80120	STORAGE TANK N80120	21101, PSDTX1248
V-309	SPENT CAUSTIC DRUM	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
V-5110	REFLUX DRUM	21101, 106.261/11/01/2003, 106.492/09/04/2000, PSDTX1248
V-5400	SEPARATOR DRUM FOR REACTORS 5-5200 & 5300	21101, PSDTX1248

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
XV-9	DMS STORAGE TANK	106.473/09/04/2000

Alternative Requirement
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# **Alternate Method of Compliance**

	Emission Unit ID No.	Applicable Requirement	AMOC ID No.
1	DA-408 DA-409	40 CFR Part 60, Subpart NNN	Alternative monitoring plan per USEPA letter dated April 19, 2011.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

APR 1 9 2011

Ms. M.I. Conway Plant Manager Chevron Phillips Chemical Company P.O. Box 1547 Port Arthur, TX 77641

Re: Request for Alternate Method of Compliance

40 CFR Subpart NNN

Chevron Phillips Chemical Company LP

AI Number: 4824500125

Dear Ms. Conway:

This letter is in response to your original request dated January 27, 2005 (updated on February 17, 2011) for waiver and alternate monitoring under the New Source Performance Standards (NSPS). As outlined in our letter below, we are approving your request for complying with the standards in 40 CFR 60 Subpart RRR in lieu of the 40 CFR 60 Subpart NNN requirements in the Ethylene Unit (EU-1544).

You have requested a waiver of the NSPS initial performance testing requirements for the vents from the following distillation units:

DA-408 DA-409

The information submitted in your request indicates that these vent streams are mixed with natural gas that is used as primary fuel gas in process heaters and boilers. The affected process heater and boilers have heat input capacities both above and below 150 MMBTU/hr.

The United States Environmental Protection Agency (EPA) hereby approves your request to waive the initial performance test for the vents from units specified above being introduced with the primary fuel into a boiler or process heater in accordance with 40 CFR 60.8(b) and as provided by 40 CFR 60.704(b)(5). Also, EPA approves your request to implement the 40 CFR 60 Subpart RRR monitoring requirements in 40 CFR 60.703(c) and the record keeping requirements of 40 CFR 60.705(b)(2)(i) and 60.705(c)(4) in lieu of the 40 CFR 60 Subpart NNN requirements. Please be advised that you must make a copy of the schematic

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diagram required by 40 CFR 60.705(s) in your initial report of the state agency and maintain a copy onsite for the life of the system to ensure that the affected vent streams are routed to appropriate control devices under this approval.

This information is based upon the information submitted in your request for the units specified and identified in this letter. This approval is consistent with previous determinations made by EPA for 40 CFR 60 Subpart NNN affected facilities. If any new information becomes available or process unit operations are changed, this determination may become void and a new determination may be necessary. If you have any questions, please contact Mr. Craig Lutz, of my staff, at (214) 665-2190.

Sincerely,

Pavid Garcia
Associate Director

Air/Toxic Inspection and

Coordination Branch

Estabon Hu

Michael de la Cruz, Air Enforcement Section Manager cc: Enforcement Division, TCEQ

> Salal Tahiri, Program Support Section Manager Field Operation Division, TCEQ

	Appendix A	
Acronym List		172

## **Acronym List**

The following abbreviations or acronyms may be used in this permit:

ACFIVI	actual cubic feet per minute
AMOC	alternate method of compliance
	Acid Rain Program
ASTM	American Society of Testing and Materials
	Beaumont/Port Arthur (nonattainment area)
	control device
CEMS	continuous emissions monitoring system
	Code of Federal Regulations
	continuous opacity monitoring system
	closed-vent system
	emission point
	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
FOP	federal operating permit
	grains per 100 standard cubic feet
	hazardous air pollutant
	hydrogen sulfide
	identification number
	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
	Million British thermal units per hour
	•
NA	nonattainment
	nonattainment not applicable
N/A	not applicable
N/A NADB	not applicable National Allowance Data Base
N/A NADB NESHAP	
N/A NADB NESHAP	
N/A	
N/A	
N/A	not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems
N/A	not applicable National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems
N/A NADB NESHAP NO <sub>x</sub> NSPS NSR ORIS Pb	not applicable  National Allowance Data Base  National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule
N/A NADB NESHAP NO <sub>x</sub> NSPS NSR ORIS Pb PBR PEMS	not applicable  National Allowance Data Base  National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  predictive emissions monitoring system
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  predictive emissions monitoring system  particulate matter
N/A NADB NESHAP NO <sub>x</sub> NSPS NSR ORIS Pb PBR PEMS PM ppmv	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume  process unit
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO  PSD	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume  process unit  prevention of significant deterioration
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PEMS  PM  ppmv  PRO  PSD  psia	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume  process unit  process unit  provention of significant deterioration  pounds per square inch absolute
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PEMS  PM  ppmv  PRO  PSD  psia  SIP	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  particulate matter  parts per million by volume  process unit  process unit
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PEMS  PM  ppmv  PRO  PSD  psia  SIP  SO <sub>2</sub>	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  particulate matter  parts per million by volume  process unit  process unit  process unit  prounds per square inch absolute  state implementation plan  sulfur dioxide
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO  PSD  psia  SIP  SO <sub>2</sub> TCEQ	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  particulate matter  parts per million by volume  process unit  prevention of significant deterioration  pounds per square inch absolute  state implementation plan  sulfur dioxide  Texas Commission on Environmental Quality
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO  PSD  psia  SIP  SO <sub>2</sub> TCEQ  TSP	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume  process unit  prevention of significant deterioration  pounds per square inch absolute  state implementation plan  sulfur dioxide  Texas Commission on Environmental Quality  total suspended particulate
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO  PSD  psia  SIP  SO <sub>2</sub> TCEQ  TSP  TVP	
N/A  NADB  NESHAP  NO <sub>x</sub> NSPS  NSR  ORIS  Pb  PBR  PEMS  PM  ppmv  PRO  PSD  psia  SIP  SO <sub>2</sub> TCEQ  TSP  TVP  U.S.C	not applicable  National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)  nitrogen oxides  New Source Performance Standard (40 CFR Part 60)  New Source Review  Office of Regulatory Information Systems  lead  Permit By Rule  Permit By Rule  predictive emissions monitoring system  particulate matter  parts per million by volume  process unit  prevention of significant deterioration  pounds per square inch absolute  state implementation plan  sulfur dioxide  Texas Commission on Environmental Quality  total suspended particulate

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Appendix B	
Major NSR Summary Table	174

		Air		Datas	Monitoring and Testing	Baranda Baraina	Reporting
Emission	Source	Contaminant	Emission	1	Requirements	Recordkeeping Requirements	Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
CA-1	Carbon Adsorption Unit	VOC	7.48	3.01	33	14, 33	33
DEG-1	Degreaser-1	VOC	0.08	0.33		GC7	
DEG-2	Degreaser-2	VOC	0.08	0.33		GC7	
E-01-1544	Cracking Furnaces BA-	VOC	2.14	9.40	3	3, 7, 9, 10	3
	101/102 Common Stack (6)	NO <sub>x</sub>	22.36	97.90		7, 9, 10	
		CO	82.54	361.54		7, 9, 10	
		SO <sub>2</sub>	10.74	17.14	34	7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-01A-1544	Economizer (6)	VOC	14.05	61.71	3	3, 7, 9, 10	3
		NO <sub>x</sub>	143.64	628.92		7, 9, 10	
		СО	508.25	2,226.23		7, 9, 10	
		SO <sub>2</sub>	70.51	112.53	34	7, 9, 10, 34, 36	34, 36
		PM	13.66	59.88		7, 9, 10	
		PM <sub>10</sub>	13.66	59.88		7, 9, 10	
		PM <sub>2.5</sub>	13.66	59.88		7, 9, 10	
E-02-1544	Cracking Furnaces BA- 103/104 Common Stack (6)	VOC	2.14	9.40	3	3, 7, 9, 10	3
		NO <sub>x</sub>	22.36	97.90		7, 8, 9, 10	
		СО	82.54	361.54		7, 8, 9, 10	
		SO <sub>2</sub>	10.74	17.14	34	7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-02A-1544	Cracking Furnace BA-115	VOC	1.86	8.13	3, 30	3, 7, 9, 10, 30	3, 30
		NO <sub>x</sub>	130.00	95.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		CO	150.00	42.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		SO <sub>2</sub>	9.30	14.85	30, 34	7, 9, 10, 30, 34, 35, 36	30, 34, 36
		PM	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>10</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>2.5</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30

Emission	Source	Air Contaminant	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E-03-1544	Cracking Furnaces BA-	VOC	2.14	9.40	3	3, 7, 9, 10	3
	105/106 Common Stack (6)	NO <sub>x</sub>	22.36	97.90		7, 8, 9, 10	
		CO	82.54	361.54		7, 8, 9, 10	
		SO <sub>2</sub>	10.74	17.14		7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-03A-1544	Cracking Furnace BA-116	VOC	1.86	8.13	3, 30	3, 7, 9, 10, 30	3, 30
		NO <sub>x</sub>	130.00	95.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		CO	150.00	42.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		SO <sub>2</sub>	9.30	14.85	30, 34	7, 9, 10, 30, 34, 35, 36	30, 34, 36
		PM	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>10</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>2.5</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30
E-04-1544	Cracking Furnaces BA- 107/108 Common Stack (6)	VOC	2.14	9.40	3	3, 7, 9, 10	3
		NO <sub>x</sub>	22.36	97.90		7, 8, 9, 10	
		CO	82.54	361.54		7, 8, 9, 10	
		SO <sub>2</sub>	10.74	17.14	34	7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-04A-1544	Cracking Furnace BA-117	VOC	1.86	8.13	3, 30,	3, 7, 9, 10, 30	3, 30,
		NO <sub>x</sub>	130.00	95.40	30, 32,	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		CO	150.00	42.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		SO <sub>2</sub>	9.30	14.85	30, 34	7, 9, 10, 30, 34, 35, 36	30, 34, 36
		PM	1.80	7.90	12, 30,	7, 9, 10, 30	30
		PM <sub>10</sub>	1.80	7.90	12, 30,	7, 9, 10, 30	30
		PM <sub>2.5</sub>	1.80	7.90	12, 30,	7, 9, 10, 30	30

Emission	Source	Air Contaminant	Emission		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E-05-1544	Cracking Furnaces BA-	VOC	2.14	9.40	3	3, 7, 9, 10	3
	109/110 Common Stack (6)	NO <sub>x</sub>	22.36	97.90		8, 9, 10	
		CO	82.54	361.54		8, 9, 10	
		SO <sub>2</sub>	10.74	17.14	34	7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-05A-1544	Cracking Furnace BA-118	VOC	1.86	8.13	3, 30	3, 7, 9, 10, 30	3, 30
		NO <sub>x</sub>	130.00	95.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		CO	150.00	42.40	30, 32	7, 8, 9, 10, 30, 32, 35, 36	30, 32, 36
		SO <sub>2</sub>	9.30	14.85	30, 34	7, 9, 10, 30, 34, 35, 36	30, 34, 36
		PM	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>10</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30
		PM <sub>2.5</sub>	1.80	7.90	12, 30	7, 9, 10, 30	30
E-06-1544	Cracking Furnaces BA- 111/112 Common Stack (6)	VOC	2.14	9.40	3	3, 7, 9, 10	3
		NO <sub>x</sub>	22.36	97.90		7, 9, 10	
		СО	82.54	361.54		7, 9, 10	
		SO <sub>2</sub>	10.74	17.14	34	7, 9, 10, 34, 35, 36	34, 36
		PM	2.08	9.12		7, 9, 10	
		PM <sub>10</sub>	2.08	9.12		7, 9, 10	
		PM <sub>2.5</sub>	2.08	9.12		7, 9, 10	
E-06A-1544	Decoke Drum	СО	114.00	35.08		13	
		PM	61.00	0.96	12	13	
		PM <sub>10</sub>	61.00	0.96	12	13	
		PM <sub>2.5</sub>	61.00	0.96	12	13	

Permit Number	: 21101/ PSDTX1248 Issua	Air Contaminant	ry 9, 2017 Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E-07-1544	Steam Superheater BA-113	VOC	1.21	5.31	3	3, 9, 10	3
	(6)	NO <sub>x</sub>	9.48	41.52		9, 10	
		CO	13.01	56.99		9, 10	
		SO <sub>2</sub>	6.07	9.69		9, 10	
		PM	1.18	5.16		9, 10	
		PM <sub>10</sub>	1.18	5.16		9, 10	
		PM <sub>2.5</sub>	1.18	5.16		9, 10	
E-CAP	Emission Cap (6) Includes:	VOC	14.05	61.71	30	7, 9, 10	
	E-01-1544	NO <sub>x</sub>	143.64	628.92	30, 32	7, 9, 10	
	E-02-1544 E-03-1544	СО	508.25	2,226.23	30, 32	7, 9, 10	
	E-04-1544 E-05-1544 E-06-1544 E-07-1544 E-01A-1544	SO <sub>2</sub>	70.51	112.53	30, 34	7, 9, 10, 34, 35, 36	34, 36
		PM	13.66	59.88	12, 30	7, 9, 10	·
		PM <sub>10</sub>	13.66	59.88	12, 30	7, 9, 10	
		PM <sub>2.5</sub>	13.66	59.88	12, 30	7, 9, 10	
E-08-1544	Heater BA-301	VOC	0.13	0.57	3	3, 9	3
		NO <sub>x</sub>	1.68	7.35		9	
		СО	1.41	6.17		9	
		SO <sub>2</sub>	0.66	1.05		9	
		PM	0.13	0.56		9	
		PM <sub>10</sub>	0.13	0.56		9	
		PM <sub>2.5</sub>	0.13	0.56		9	
E-09-1544	Heater BA-401	VOC	0.14	0.59	3	3, 9	3
		NO <sub>x</sub>	1.73	7.56		9	
		CO	1.45	6.35		9	
		SO <sub>2</sub>	0.68	1.08		9	
		PM	0.13	0.57		9	
		PM <sub>10</sub>	0.13	0.57		9	
		PM <sub>2.5</sub>	0.13	0.57		9	

Emission	Source	Air Contaminant	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E-10-1544	Diesel Engine – Primary	VOC	0.08	0.34		25	
		NO <sub>x</sub>	2.99	13.07		25	
		CO	2.45	10.74		25	
		SO <sub>2</sub>	0.01	0.04		25	
		PM	0.10	0.42		25	
		PM <sub>10</sub>	0.10	0.42		25	
		PM <sub>2.5</sub>	0.10	0.42		25	
E-11-1544	Diesel Engine - Secondary	VOC	0.08	0.34		25	
		NO <sub>x</sub>	2.99	13.07		25	
		CO	2.45	10.74		25	
		SO <sub>2</sub>	0.01	0.04		25	
		PM	0.10	0.42		25	
		PM <sub>10</sub>	0.10	0.42		25	
		PM <sub>2.5</sub>	0.10	0.42		25	
E-24-FLARE	Process Flare - Normal Operation -	VOC	416.50	33.96	3, 19	3, 19	
		NO <sub>x</sub>	90.68	38.34	19	19	
		CO	362.11	148.24	19	19	
		SO <sub>2</sub>	0.33	0.83	19	19	
		H <sub>2</sub> S	0.01	0.01	19	19	
	Process Flare	VOC	83.54	0.48	19	11	
	- Normal Operation	NO <sub>x</sub>	20.98	2.98	19	11	
	Contribution from Acetylene Converter	СО	83.99	11.90	19	11	
	Regeneration (7)	SO <sub>2</sub>	0.01	0.01	19	11	
F-N1-VDU	Vapor Destruction Unit N1	VOC	0.16	0.19	3, 5, 21, 31	3, 5, 6, 21, 31	3, 5, 31
	for Storage Tanks 815 and	NO <sub>x</sub>	1.31	1.24	21, 31	6, 21, 31	31
	816	CO	11.24	10.62	21, 31	6, 21, 31	31
		SO <sub>2</sub>	0.01	0.01	21, 31	21, 31	31

Emission	Source	Air Contaminant	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
F-40-FLARE	Process Flare	VOC	476.58	23.19	3, 4, 5, 19	3, 4, 5, 19	3, 4, 5
		NO <sub>x</sub>	71.49	7.02	19	19	
		СО	364.28	35.79	19	19	
		SO <sub>2</sub>	1.41	0.11	19	19	
		H <sub>2</sub> S	0.01	0.01	19	19	
F-17-FLARE	Back-Up Flare for Flare 40 (8)	VOC	-	-	3, 4, 5, 19	3, 4, 5, 19	3, 4, 5
		NO <sub>x</sub>	-	-	19	19	
		СО	-	-	19	19	
		SO <sub>2</sub>	-	-	19	19	
		H <sub>2</sub> S	-	-	19	19	
E-137-CT	Cooling Tower 137 (5)	VOC	5.73	25.11	18	18	
		PM	3.42	14.96	18	18	
		PM <sub>10</sub>	1.02	4.48	18	18	
		PM <sub>2.5</sub>	0.01	0.03	18	18	
F-294PS	Cooling Tower 294 (5)	VOC	2.77	12.14	18	18	
		PM	3.30	14.47	18	18	
		PM <sub>10</sub>	2.10	9.19	18	18	
		PM <sub>2.5</sub>	0.01	0.03	18	18	
E-AN-1544	EU-1544 Analyzer Vents	VOC	0.16	0.65		GC7	
	Routed to Atmosphere	NO <sub>x</sub>	0.01	0.01		GC7	
		CO	0.01	0.01		GC7	
E-AN-1740	Flame Ionization Detector	VOC	0.01	0.01		GC7	
		NO <sub>x</sub>	0.01	0.01		GC7	
		СО	0.01	0.01		GC7	
E-TNK-1544	EU-1544 Miscellaneous Storage Tanks	VOC	4.30	0.03		17	3

		Air	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Contaminant Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
EU-CATSTACK	Silencer Stack	VOC	1.00	0.24	opeci cona.	11, 25	Opeo: Gona.
	- Normal Operation	CO	6.00	1.44		11, 25	
	Emissions from Acetylene	SO <sub>2</sub>	5.83	1.40		11, 25	
	Converter Regeneration (7)	PM	0.25	0.06		11, 25	
		PM <sub>10</sub>	0.25	0.06		11, 25	
		PM <sub>2.5</sub>	0.25	0.06		11, 25	
J-3	Firewater Pump Engine J-3	VOC	0.27	0.01		GC7	
		NO <sub>x</sub>	9.82	0.49		GC7	
		СО	2.02	0.10		GC7	
		SO <sub>2</sub>	0.01	0.01		GC7	
		PM	0.21	0.01		GC7	
		PM <sub>10</sub>	0.21	0.01		GC7	
		PM <sub>2.5</sub>	0.21	0.01		GC7	
J-4	Firewater Pump Engine J-4	VOC	0.27	0.01		GC7	
		NO <sub>x</sub>	9.82	0.49		GC7	
		СО	2.02	0.10		GC7	
		SO <sub>2</sub>	0.01	0.01		GC7	
		PM	0.21	0.01		GC7	
		PM <sub>10</sub>	0.21	0.01		GC7	
		PM <sub>2.5</sub>	0.21	0.01		GC7	
J-3-TNK	Firewater Engine J-3 Diesel Fuel Tank	VOC	0.02	0.01		17	
J-4-TNK	Firewater Engine J-4 Diesel Fuel Tank	VOC	0.02	0.01		17	
T-500	Gasoline Storage Tank	VOC	3.37	0.73		17	
T-502	Diesel Storage Tank	VOC	0.25	0.01		17	
T-FB-203	Wash Oil Tank	VOC	0.74	0.04		17	
800	Storage Tank T-800	VOC	1.98	5.38	5	5, 17	5
809	Storage Tank T-809	VOC	1.49	3.53		17	
822	Storage Tank T-822	VOC	1.69	4.52		17	
2158	Storage Tank T-2158	VOC	1.23	2.42		17	
2176	Storage Tank T-2176	VOC	1.38	2.90		17	3

Emission	Source	Air Contaminant	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
2177	Storage Tank T-2177	VOC	1.47	3.29		17	3
F-1746-CU	Cumene Unit Process Fugitives (5)	VOC	0.03	0.11	22, 23	2, 22,23	22
F-1741	Cyclohexane Unit	VOC	2.00	8.78	3, 22, 24	2, 3, 22, 24	3, 22
	Process Fugitives (5)	Freon	2.23	9.77	22, 24	2, 22, 24	22
F-8841	HVRU Process Fugitives (5)	VOC	0.66	2.90	3, 22, 24	2, 3, 22, 24	3, 22
F-138PS	Pump House 138 Fugitives (5)	VOC	0.05	0.22	22, 23	2, 22, 23	22
F-229PS	Pump House 229 Fugitives (5)	VOC	0.22	0.98	22, 23	2, 22, 23	22
F-382PS	Pump House 382 Fugitives (5)	VOC	0.22	0.96	22, 23	2, 22, 23	22
F-1741OFFP	1741 Off Plot Fugitives (5)	VOC	0.25	1.08	22, 23	2, 23	22
F-1740	Fugitive Emissions from CFPU-1740 (5)	VOC	1.04	4.55	3, 22, 24	2, 3, 22, 24	3, 22
F-508	Fugitive Emissions from PS- 508 (5)	VOC	0.33	1.43	3, 22, 23	2, 3, 22, 23	3, 22
F-1544	Process Fugitives (5)	VOC	37.81	165.62	20, 22, 23	2, 20, 22, 23	20, 22
		1,3-Butadiene	0.46	2.00	22, 23	2, 22, 23	22
MSSTANK	MSS Tanks	VOC	25.44	4.64	41	41, 44	
		NO <sub>X</sub>	1.25	0.36	41	41, 44	
		СО	1.46	0.42	41	41, 44	
		SO <sub>2</sub>	0.04	0.01	41	41, 44	
		PM	0.34	0.05	41	41, 44	
		PM <sub>10</sub>	0.34	0.05	41	41, 44	
		PM <sub>2.5</sub>	0.34	0.05	41	41, 44	
		Benzene	12.68	1.80	4, 41	4, 41, 44	4
MSS1544FLR	MSS Flare 24	VOC	2,933.17	112.11	47, 48	47, 48	
		NO <sub>X</sub>	464.93	23.62	47, 48	47, 48	
		СО	3,057.24	148.31	47, 48	47, 48	
		SO <sub>2</sub>	254.36	16.96	47, 48	47, 48	
		H <sub>2</sub> S	2.71	0.18	47, 48	47, 48	
		Benzene	139.54	5.99	47, 48	47, 48	

Permit Number: 21101/ PSDTX1248 Issuance Date: January 9, 2017							
Emission	Source	Air Contaminant	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Point No. (1)	Name (2)	Name (3)	lbs/hour	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
MSSATM	Atmospheric MSS Emissions	VOC	131.03	1.85	38, 39, 40, 43	37, 38, 39, 40, 43, 45	
		Benzene	9.67	0.28	38, 39	37, 38, 39, 45	
		H <sub>2</sub> S	0.01	0.01	38, 39	37, 38, 39, 45	
		PM	10.84	0.27	38, 39	37, 38, 39, 45	
MSSCTRL	MSS Controlled Emissions	VOC	68.85	3.41	38, 43, 47	37, 38, 43, 45, 46, 47	
		Benzene	20.65	1.02	38	37, 38, 45	
MSSAROMFLR	MSS Flare 40 (or Flare 17)	VOC	166.26	8.42	47, 48	47, 48	
		NOx	15.21	1.39	47, 48	47, 48	
		СО	77.52	7.07	47, 48	47, 48	
		SO2	0.29	0.02	47, 48	47, 48	
		H <sub>2</sub> S	0.01	0.01	47, 48	47, 48	
		Benzene	10.45	0.51	47, 48	47, 48	

#### Footnotes:

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide H<sub>2</sub>S - hydrogen sulfide BD - butadiene

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Emission Cap (EPN E-CAP) includes EPNs E-01-1544, E-02-1544, E-03-1544, E-04-1544, E-05-1544, E-06-1544, E-07-1544 and E-01A-1544.
- (7) Routine emissions attributed to acetylene converter regeneration activities. These emissions were previously referred to as maintenance, startup, and shutdown (MSS) emissions.
- (8) During periods when Flare 40 (EPN F-40-FLARE) is undergoing maintenance or is otherwise unavailable, Flare 17 (EPN F-17-FLARE) or a temporary flare meeting the requirements of 40 CFR §60.18 shall be used as the control device for all streams normally routed to Flare 40. Simultaneous operation of Flare 40 and Flare 17 or the temporary flare is prohibited. Emissions from Flare 40, Flare 17, and any associated temporary flare shall be limited to the MAERT limits established for Flare 40.



# Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To Chevron Phillips Chemical Company LP Authorizing the Construction and Operation of Chevron Phillips Chemical Port Arthur Facility Located at Port Arthur, Jefferson County, Texas Latitude 29° 51′ 9″ Longitude –93° 58′ 44″

Permits: 21101 and	d PSDTX1248	
Revision Date:	January 9, 2017	`L \
Expiration Date: _	May 13, 2026	TO A. P. P.
_		For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] <sup>1</sup>
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

Revised (10/12)

- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] <sup>1</sup>
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. <sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

# **Special Conditions**

# Permit Numbers 21101 and PSDTX1248

- 1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.
- 2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the following exception:

Safety relief valves that discharge to the atmosphere only as a result of fire or failure of utilities provided that: a) each valve is equipped with a rupture disc upstream, b) a pressure sensing device is installed between the relief valve and rupture disc to monitor disc integrity, and c) all leaking discs are replaced at the earliest opportunity but no later than the next process shutdown. The following valves are included in this exception:

PSV-1	PSV-1R	PSV-470
PSV-2	PSV-5R	PSV-471
PSV-3	PSV-7R	PSV-604
PSV-4	PSV-401	PSV-605
PSV-6	PSV-402	PSV-4408
PSV-7	PSV-452	PSV-4409
PSV-8	PSV-453	

The permit holder shall keep records of disc integrity monitoring and repair to demonstrate compliance with this condition.

# **Federal Applicability**

- 3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated for the following:
  - A. Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 in Title 40 Code of Federal Regulations (40 CFR) Part 60, Subparts A and Kb.
  - B. Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) in Title 40 Code of Federal Regulations (40 CFR) Part 60, Subparts A and VV.
  - C. The VOC emissions from SOCMI Distillation Columns in 40 CFR Part 60, Subparts A and NNN.

- D. The VOC Emissions from SOCMI Reactor Processes in 40 CFR Part 60, Subparts A and RRR.
- 4. This facility shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants (NESHAP) promulgated for the following:
  - A. National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene in 40 CFR Part 61, Subparts A and J.
  - B. National Emission Standard for Equipment Leaks (Fugitive Emission Sources)in 40 CFR Part 61, Subparts A and V.
  - C. National Emission Standard for Benzene Emissions From Benzene Storage Vessels in 40 CFR Part 61, Subparts A and Y.
  - D. National Emission Standard for Benzene Waste Operationsin 40 CFR Part 61, Subparts A and FF.
- 5. These facilities shall comply with all applicable requirement of Title 30 Texas Administrative Code (30 TAC) §§ 113.100, 113.110, 113.120, 113.130, 113.300, 133.520, 113.550, and 113.560, including the referenced requirements contained in the EPA regulations of National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Source Categories in 40 CFR, Part 63, promulgated for the following:
  - A. National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, Subparts A and F.
  - B. National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, Subparts A and G.
  - C. National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, Subparts A and H.
  - D. National Emission Standards for Equipment Leaks—Control Level 2 Standards, Subparts A and UU.
  - E. National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations, Subparts A and XX.
  - F. National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards, Subparts A and YY.

# **Operational Limits**

- 6. Cyclohexane production is limited to 215 million (MM) gallons per rolling twelve months. Records shall be kept at the plant site on a rolling twenty-four month basis and made available at the request of Texas Commission on Environmental Quality (TCEQ) personnel to show compliance with this condition.
- 7. Furnace feedstocks are limited to any of the following: butane for any two Furnaces designated as BA-101 through BA-112 and BA-115 through BA-118, ethane/propane mix, propane liquid, refinery propane gases, purity ethane, recycle ethane, recycle propane, and other recycled streams. Records of annual ethylene production for the unit containing the 16 ethylene furnaces shall be maintained and kept at the plant site on a 12-month rolling average. These records shall be made immediately available to TCEQ personnel upon request.
- 8. Carbon monoxide (CO) and nitrogen oxides (NO<sub>x</sub>) emissions from each new Ethylene Furnace identified as BA115 through BA118, relative to furnace heat duty (fuel high heating value), shall not exceed the following during normal operation on a 30-operating day rolling average:

Emission Point No. (EPN)	Pollutant	Emissions (lb/MMBtu)
E-02A-1544	CO	0.040
	NOx	0.090
E-03A-1544	CO	0.040
	NOx	0.090
E-04A-1544	CO	0.040
	NOx	0.090
E-05A-1544	CO	0.040
	NOx	0.090

The pound (lb)/MMBtu values shall be averaged daily for each new ethylene furnace. The daily average lb/MMBtu values for each new ethylene furnace shall then be averaged over a consecutive 30-operating day period of normal operation and these values shall be used to demonstrate compliance with the CO and  $NO_x$  lb/MMBtu values of this special condition.

The lb/MMBtu values do not apply during an ethylene furnace decoking operation. Records shall be kept at the plant site showing a monthly total of hours that each furnace in this special condition operates in a decoking mode. These records shall be made immediately available to the TCEQ personnel upon request.

- 9. Fuel-fired in each Ethylene Furnace identified as BA115 through BA118, 12 existing Ethylene Cracking Furnaces identified as BA101 through BA112, Steam Superheater BA113, and Heaters BA-301 and BA-401 is limited to either of the three fuels listed below or any combination of A, B, and C.
  - A. Gaseous fuel containing hydrogen.
  - B. Gaseous fuel containing hydrogen sulfide (H<sub>2</sub>S) at not more than 162 parts per million by volume (ppmv) averaged over any three-hour period and 50 ppmv averaged over any rolling 12-month period.
  - C. Pipeline-quality, sweet natural gas containing not more than 0.25 grain (gr) of  $H_2S$  and 5 grains total sulfur per 100 dry standard cubic feet.

Records of  $H_2S$  content of the gaseous fuel shall be maintained at the plant site and be made available to the TCEQ personnel upon request. Use of any other fuel for normal or standby operation requires a permit amendment and approval from the TCEQ Executive Director.

10. The fired heating duty, on a higher heating value basis, shall not exceed the following:

Description	One-Hour Maximum Firing Rate (MMBtu/hr)
Cracking Furnace BA115	242
Cracking Furnace BA116	242
Cracking Furnace BA117	242
Cracking Furnace BA118	242
Cracking Furnace BA101	139.7
Cracking Furnace BA102	139.7
Cracking Furnace BA103	139.7
Cracking Furnace BA104	139.7
Cracking Furnace BA105	139.7
Cracking Furnace BA106	139.7
Cracking Furnace BA107	139.7
Cracking Furnace BA108	139.7
Cracking Furnace BA109	139.7
Cracking Furnace BA110	139.7
Cracking Furnace BA111	139.7
Cracking Furnace BA112	139.7

Description	One-Hour Maximum Firing Rate (MMBtu/hr)
Steam Superheater BA113	158.0

Records of the one-hour maximum firing rates shall be maintained at the plant site and be made immediately available to the TCEQ personnel upon request.

- 11. This permit authorizes emissions be sent to the flare designated as EPN E-24-FLARE for the following acetylene converter regeneration activities:
  - A. Catalyst regeneration with hydrogen reduction gas for up to 120 hours per rolling 12 months.

This permit authorizes emissions be sent to the EPN designated as EPN EU-CATSTACK for the following acetylene converter regeneration activities:

B. Air oxidation for up to 480 hours per rolling12-months.

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Records shall be kept at the plant demonstrating compliance with this representation for the last five years.

- 12. There shall be no visible emissions for periods exceeding five minutes aggregated over any two-hour period from the four Cracking Furnaces identified as BA115 through BA118 or the Decoking Vent (EPN E-06A-1544).
- 13. A. Decoking operations utilizing EPN E-06A-1544 shall be limited to 63 decoking events per rolling 12-months. No more than 2 decoking events may occur at any given time.
  - B. Total operating hours of the Decoking Cyclones (EPN E-06A-1544) shall be limited to 3,024 hours per calendar year.
  - C. The holder of this permit shall keep monthly records of decoking events and the cyclones' operating hours. These records shall be maintained for a period of five years at the plant site and shall be made immediately available to the TCEQ personnel upon request.

## Loading

14. Cyclohexane hourly and annual barge and ship loading is limited to 5,000 barrels per hour and 4,019,048 barrels per year. Simultaneous barge and ship loading of cyclohexane is prohibited at the dock site under the ownership and control of the permit holder of NSR Permit Number 6825A when they are loading cyclohexane received by pipeline from this permit holder.

A year is defined as a rolling 12-month period. Cyclohexane barge loading throughput records in barrels shall be kept at the plant site and updated once a month for review at the request of TCEQ personnel.

## **Storage Tanks**

- 15. Storage tanks designated as EPNs 800, 809, 822, 2158, 2176, and 2177 shall each be limited to a maximum throughput of 210,000 gallons per hour and 600,000,000 gallons per year.
- 16. The storage tanks designated as EPNs 800, 809, 822, 2158, 2176, 2177, 815, and 816 may only be in service for any of the materials listed below with the listed maximum number of tanks in each service at any given time:

Material	Number of Tanks in Service at Any Given Time
Raw Pyrolysis Gasoline	3 tanks
Benzene	2 tanks
Cyclohexane	3 tanks
Off-test Cyclohexane	1 tank

- 17. Storage tanks are subject to the following requirements: The control requirements specified in parts A-C of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95°F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons (1/17).
  - A. The tank emissions must be controlled as specified in one of the paragraphs below:
    - (1) An internal floating deck or "roof" shall be installed. A domed external floating roof tank is equivalent to an internal floating roof tank. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the floating roof: (1) a liquid-mounted seal, (2) two continuous seals mounted one above the other, or (3) a mechanical shoe seal.
    - (2) An open-top tank shall contain a floating roof (external floating roof tank) which uses double seal or secondary seal technology provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal and the secondary seal is rim-mounted. A weather shield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.
    - (3) All vents from Tanks T-815 and T-816 shall be routed to the Vapor Destruction Unit (EPN F-N1-VDU) unless otherwise authorized by this permit or other permit action (permit by rule or standard permit).

- B. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and any seal gap measurements specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates inspection was performed, any measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.
- C. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- D. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
- E. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the permit application (PI-1 dated April 7, 2015). Sample calculations from the application shall be attached to a copy of this permit at the plant site.

F. The permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.

# **Cooling Tower**

- 18. The cooling towers (EPN E-137CT and EPN F-294PS) shall be operated and monitored in accordance with the following:
  - A. The cooling tower water from EPNs E-137CT and F-294PS shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ <u>Sampling Procedures Manual</u>, Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director. The leak level for the tower is defined as 50 percent of

the MAERT lb/hr VOC limit for EPNs E-137CT and F-294PS. When monthly monitoring meets or exceeds the leak definition, the facility will take measures to identify and repair faulty equipment. Additionally, the El Paso stripped air sample will be analyzed for chemical speciation. The faulty equipment shall be repaired at the earliest opportunity, but no later than the next scheduled shutdown of the process unit in which the leak occurs.

- B. The results of the monitoring and maintenance efforts shall be recorded, and such records shall be maintained for a period of two years. The records shall be made immediately available to TCEQ personnel upon request. Each cooling tower cell authorized in this permit shall be equipped with drift eliminators.
- C. Cooling Tower EPN E-137CT shall each be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Cooling Tower EPN F-294PS shall each be equipped with drift eliminators having manufacturer's design assurance of 0.005% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
- D. Total dissolved solids (TDS) shall not exceed 5,000 parts per million by weight (ppmw) in Cooling Tower EPN E-137CT. Total dissolved solids (TDS) shall not exceed 2,000 parts per million by weight (ppmw) in Cooling Tower EPN F-294PS. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM<sub>10</sub>, and PM<sub>2.5</sub> as represented in the permit application calculations.
- E. Cooling towers shall be analyzed for particulate emissions using one of the following methods:
  - (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
  - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per μmho/cm or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
  - (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.

- (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
- F. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
  - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
  - (2) The analysis method for conductivity shall be ASTM D1125-95A (field or routine laboratory testing), ASTM D1125-95B (continuous monitor), EPA Method 9050 A, EPA Method 120.1, or SM 2510 B. The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
  - (3) Alternate sampling and analysis methods may be used to comply with F(1) and F(2) with written approval from the TCEQ Regional Director.
  - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- G. Emission rates of PM, PM<sub>10</sub> and PM<sub>2.5</sub> shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

#### **Flares**

19. Flares (EPN F-24-FLARE, EPN, F-17-FLARE, and EPN F-40-FLARE) shall be designed and operated in accordance with the following requirements: The flares identified as EPNs E-24-FLARE, F-17-FLARE, and F-40-FLARE shall be designed and operated such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to the flares.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

- A. Each flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date and duration of any loss of this pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- B. Each flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam or air assist to the flares.
- C. The permit holder shall install and maintain a continuous flow monitor and composition analyzer that provides a record of the vent stream flow and composition, including Btu content, to the flares designated as EPN E-24-FLARE, EPN F-17-FLARE, and EPN F-40-FLARE. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlets such that the total vent stream to the flares are measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be  $\pm 5.0\%$ , temperature monitor shall be  $\pm 2.0\%$  at absolute temperature, and pressure monitor shall be  $\pm 5.0$  mm Hg.

Calibration of the analyzers shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in each flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when each flare is operational, averaged over a rolling 12 month period. Flared gas net heating value and actual exit velocity determined in

- accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour.
- D. Quality assured (or valid) data must be generated when the flares designated as EPNs E-24-FLARE, F-17-FLARE, and F-40-FLARE are operating except during the performance of preventive maintenance, calibration or zero and span check following manufacturer's recommendations or facility's procedures. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data) or repair shall not exceed five percent of the time (in minutes) that this flare is operational averaged over a rolling 12 month period. The measurements missed shall be estimated using engineering judgment or by other means and the methods used shall be recorded.
- E. The flare gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit amendment application, PI-1 dated April 7, 2015.

#### Back-Up Control Scenario

- F. During periods when Flare 40 (EPN F-40-FLARE) is undergoing maintenance or is otherwise unavailable, Flare 17 (EPN F-17-FLARE) or a temporary flare meeting the requirements of 40 CFR §60.18 shall be used as the control device for all streams normally routed to Flare 40. Simultaneous operation of Flare 40 and Flare 17 or the temporary flare is prohibited. Emissions from Flare 40, Flare 17, and any associated temporary flare shall be limited to the MAERT limits established for Flare 40.
- G. In lieu of the permanent composition analyzer described in Part D above, Flare 17 may use an equivalent temporary composition analyzer or calorimeter. The analyzer or calorimeter shall be used to determine, at minimum, BTU content of the waste stream routed to the flare. The temporary device shall conform to the same calibration, operation, quality assurance, and record keeping requirements as a permanent device as indicated in Parts E through F of this condition.
- 20. The following requirements apply to capture systems for the flares designated as EPN F-24-FLARE, EPN, F-17-FLARE, and EPN F-40-FLARE.
  - A. If used to control pollutants designated as VOC, either:
    - (1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
    - (2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

- Compliance with these requirements can be demonstrated either by meeting applicable Special Condition Number 22 requirements or those at 40 CFR 63.983(b).
- B. The control device shall not have a bypass. Or, if there is a bypass for the control device, the permit holder shall comply with either of the following requirements:
  - (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
  - (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.
- C. A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service.
- D. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed. Unsafe to instrument monitor valves, flanges and connectors and unsafe to inspect flanges and connectors are exempt from the inspection or instrument monitoring requirements unless they are safe to inspect or instrument monitor at the time of monthly inspections or annual monitoring. Valves, flanges and or connectors that are unsafe to instrument monitor and unsafe to inspect must be identified in a list made available upon request.

## **Vapor Destruction Unit**

- 21. The vapor destruction unit EPN F-N1-VDU shall be designed and operated in accordance with the following requirements:
  - A. The vapor destruction unit (VDU) shall achieve 99 percent control of the waste gas directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1000 °F prior to the initial stack test performed in accordance with Special Condition No. 31. Following the completion of that stack test, the six minute average temperature shall be maintained above the minimum one hour average temperature maintained during the last satisfactory stack test.
  - B. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, calibrated or have a calibration check

- performed at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of  $\pm 2$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 2.5^{\circ}$ C.
- C. Quality assured (or valid) data must be generated for the temperature and flow measurements when the VDU is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VDU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
  - D. The VDU shall be operated with no visible emissions during all times waste gas could be directed to it. Each temperature and flow monitoring device shall be accurate to, and shall be calibrated or have a calibration check performed at a frequency in accordance with, the manufacturer's specifications.
- E. The permit holder shall install continuous flow monitors that provide a record of the vent stream flow and net gas flow to the VDU. The flow monitor sensor shall be installed in the vent stream as near as possible to the VDU inlet such that the total vent stream to the VDU is measured. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow shall be recorded each hour. The flow monitors shall be calibrated using a prime standard at every turnaround or at least every two years, whichever comes first, to meet the following accuracy specifications: the flow monitor shall be ±5.0 percent.

# Piping, Valves, Connectors, Pumps, Agitators, and Compressors in VOC Service - 28VHP

- 22. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:
  - A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
- (2) a written or electronic database or electronic file;
- (3) color coding;
- (4) a form of weatherproof identification; or

- (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
  - E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve:

or

the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an

approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system.

- Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC § 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC § 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.
- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

# Annual Connector and Flange Monitoring with an Instrument for VOC Service - 28 CNTA: EPNs F-1544, F-138PS, F-508, F-1746, F-229PS, F-382PS, and F-1741

23. In addition to the weekly physical inspection required by Item E of Special Condition No. 22, all connectors and flanges in light liquid service and all connectors and flanges in gas/vapor service shall be monitored annually with an approved gas analyzer in accordance with Items F through J of Special Condition No. 22. Alternative monitoring frequency schedules of 40 CFR Part 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, may be used in lieu of the monitoring frequency required by this permit condition. Compliance with this condition does not assure compliance with requirements of applicable state or federal regulation and does not constitute approval of alternative standards for these regulations.

# Connectors in VOC Service Inspected Quarterly - 28CNTQ: EPNs F-1740, F-1741, and F-8841

- 24. In addition to the weekly physical inspection required by Item E of Special Condition 22, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items F thru J of Special Condition22. (28CNTQ)
  - A. Connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

B. The percent of connectors leaking used in paragraph A shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

- Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
- Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor connectors.
- Cp = the percentage of leaking connectors for the monitoring period.

# **Miscellaneous Requirements**

25. Fuel for the two Lean Burn Engines (EPN E-10-1544 and E-11-1544) shall be diesel.

The Silencer Stack (EPN EU-CATSTACK) is limited to 10 catalyst regenerations per calendar year at 48-hours per regeneration.

Records shall be kept at the plant site demonstrating compliance with each requirement for the most recent two years of operation. These records shall be made immediately available to TCEQ personnel upon request.

- 26. The two fire water pump engines designated as EPN J-3 and J-4 shall be limited to 100 hours of non-emergency use each on a rolling 12-month basis. Each engine is limited to use of diesel fuel. Use of another fuel can be authorized through use of a permit by rule claim or a permit amendment.
- 27. The following 11 Analyzer Vents AN301, AN302, AN303A, AN303B, AN303C, AN306, AN445, AN2805D, AN2814, AN3314D, and AN4619 are designated as EPN E ANVENTS-1544.
- 28. All process wastewater from existing and proposed ethylene-related facilities shall be piped in an enclosed system to an off-site wastewater treatment facility.
- 29. The holder of this permit shall submit at the request of the TCEQ Regional Director or designated representative, documentation which demonstrates the permit holder is achieving compliance with all general and special permit conditions. This documentation will consist of a detailed statement explaining how each requirement in a

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condition is met. It will also include a sample of each record sheet required to be maintained by any condition, NESHAP and New Source Performance Standards (NSPS) requirements and a listing of all testing required with test dates.

# **Initial Determination of Compliance**

30. The holder of this permit shall perform stack sampling and other testing, as required, to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from two of the four new Ethylene Furnaces identified as BA115 through BA118. The two furnaces to be sampled shall be determined at the pretest meeting. If the tested furnaces exceed any emission limit(s) of this permit, then all four furnaces shall be tested for an exceedance of such emission limit(s). Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with a modified EPA Reference Method 5 for particulate matter (PM) or equivalent PM methods. All PM shall be considered particulate matter less than 10 microns in diameter (PM<sub>10</sub>) for determination of compliance with maximum allowable emission rates. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

Sampling ports and platforms shall be incorporated into the design of the four Ethylene Furnaces (identified as BA115 through BA118) Exhaust Stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.

A. The TCEQ Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or the EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

- Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Regional Office.
- B. Air contaminants emitted from two of the four new Ethylene Furnaces identified as BA115 through BA118 to be tested for include (but are not limited to) the following: CO,  $NO_x$ ,  $PM_{10}$ , and opacity. Opacity measurement shall be performed during the initial performance test. If opacity measurement cannot be performed during the performance test, it shall be done under similar full-load conditions. The testing shall be used to demonstrate compliance with maximum allowable emission rates and other emissions limitations which are stated in these conditions.
- C. Sampling shall occur from the Ethylene Furnaces identified as BA115 through BA118 and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires the EPA approval, and requests shall be submitted to the TCEQ Regional Office.
- D. Each furnace, as it is being tested, shall operate at maximum firing rate. Primary operating parameters that enable determination of firing rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the furnace is unable to operate at maximum rates during testing, then future firing rates may be limited to the rates established during testing. Additional stack testing may be required when higher firing rates are achieved.
- E. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. One copy of the final sampling report sent to the appropriate TCEQ Regional Office within 60 days after sampling is completed.
- 31. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Vapor Destruction Unit (VDU, EPN F-N1-VDU) to demonstrate compliance with the VOC destruction removal efficiency specified in Special Condition No. 21. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and the U.S. EPA Reference Methods (1/17).

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60)

testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
  - (1) Proposed date for pretest meeting.
  - (2) Date sampling will occur.
  - (3) Name of firm conducting sampling.
  - (4) Type of sampling equipment to be used.
  - (5) Method or procedure to be used in sampling.
  - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
  - (7) Procedure/parameters to be used to determine worst case emissions.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from EPN F-N1-VDU to be tested for include, but are not limited to, VOC destruction removal efficiency.
- C. Sampling shall occur within 180 days after issuance of this permit (or increase in production, as appropriate) and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate while maintaining the temperature in, or immediately downstream of, the combustion chamber above 1000 °F, in conjunction with other parameters represented in the permit amendment application (PI-1 dated April 7, 2015) during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the inlet vent flow or VOC inlet concentration are greater than that recorded during the test period, stack sampling shall be

- performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the Regional Office.
- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
  - One copy to the appropriate TCEQ Regional Office.
  - One copy to each local air pollution control program.
- F. Sampling ports and platforms shall be incorporated into the design of the VDU (EPN F-N1-VDU) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

# **Continuous Determination of Compliance**

- 32. The holder of this permit shall install, calibrate, maintain and operate a continuous emissions monitoring system (CEMS) to measure and record the in-stack concentration of CO and  $NO_x$  from each of the four Ethylene Furnaces identified as BA115 through BA118.
  - A. Each CEMS shall meet the design and performance specifications, pass the field tests, meet the installation requirements, data analysis, and reporting requirements specified in Performance Specification No. 2 for NO $_{\rm x}$ , No. 3 for carbon dioxide and oxygen (O $_{\rm 2}$ ), and No. 4 for CO, 40 CFR Part 60, Appendix B. The performance specification tests shall be conducted prior to or during the sampling required in the initial determination of compliance section of this permit, and written copies of the results shall be submitted within 60 days of test completion to the TCEQ Regional Office.
  - B. Each CEMS system shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days, unless the monitor is required by a subpart of NSPS or NESHAP, in which case zero and span shall be done daily without exception. Each CEMS will have a cylinder gas audit (CGA) performed at least quarterly. The procedures followed during the CGA shall comply with the requirements of 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2. Daily records shall be kept in accordance with 30 TAC Chapter 116.
  - C. Each exhaust stack CEMS monitoring data will be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Flow rates to convert ppmv to mass

emission rates in pounds per hour (lbs/hr) may be obtained from calculations based on each furnace's exhaust stack flow rate, each furnace's firing rate and percent  $O_2$  in each furnace's exhaust stack. The individual average concentrations shall be used to determine lbs/hr flow rates at least once per day in order to demonstrate compliance with the emission limitations contained in this permit.

Quality-assured (or valid) data must be generated when the four Ethylene Furnaces identified as BA115 through BA118 are operating except during the performance of a daily zero and span check on CEMS. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the four Ethylene Furnaces identified as BA115 through BA118 operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

- D. All CGA exceedances of ±15 percent accuracy and any CEMS downtime not corrected within 24-hours shall be reported to the TCEQ Regional Office, and necessary corrective action shall be taken. Unscheduled CEMS downtime is any CEMS downtime not required for daily zero and span checks and annual relative accuracy test audits. Supplemental stack concentration measurements may be required at the TCEQ Regional Director's discretion.
- 33. The HVRU shall vent through a carbon adsorption system (CAS) consisting of at least two activated carbon canisters working in parallel such that the vent emissions are alternately controlled by each canister while the other canister is regenerated. The Cyclohexane concentration of the CAS exhaust shall be monitored and recorded by a continuous emission monitoring system (CEMS) that is capable of measuring cyclohexane concentration in the exhaust air stream of the control device (1/17).
  - A. The CAS shall be sampled and recorded continuously while the vent valves are open at the outlet by a CEMS to assure the Cyclohexane mass emission rate does not exceed the MAERT limit of 7.48 lb/hr. An alarm shall be installed such that an operator is alerted and can take action before the CAS outlet lb/hr emission rate exceeds the maximum allowable MAERT limit.
  - B. The CEMS shall meet the design and performance specifications, pass the field tests, meet the installation requirements, and complete the data analysis and reporting requirements specified in Performance Specification 9, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B.

The system shall be calibrated daily with the mid-level calibration gas when the CAS is in operation, and corrective action taken when the daily calibration drift exceeds ten percent (10%) of the certified concentration value of the cylinder. If the difference between the analyzer response and the cylinder concentration

for cyclohexane is greater than 10%, inspect the instrument making any necessary adjustments and conduct an initial multi-point calibration. This period of time shall be considered CEMS downtime until the successful completion of the multi-point calibration.

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multipoint calibration procedure in Section 10.1 of Performance Specification 9 shall be performed after any routine maintenance or repair, or at least once every calendar quarter. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9 where the measured concentration is an expected value of 100 ppm and the high level calibration gas has a concentration of up to 500 ppm.

Any failed quarterly multi-point calibration and CEMS downtime exceeding 5% of the total operating hours shall be reported to the appropriate TCEQ Regional Manager with the next semiannual deviation report, and necessary corrective action shall be taken. The time period after any failed quarterly audit shall be considered CEMS downtime until the successful completion of a corresponding audit following the corrective action.

Quality assured (or valid) data must be generated when the CAS is operating except during the performance of daily or quarterly checks. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the CAS operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded.

- C. When the CEMS is out of service, proper operation of the CAS shall be ensured through system inspection and evaluation and operation in accordance with the manufacturer's recommendations, and after 180 days of operation, also within parameters shown to assure compliance with the maximum lb/hr MAERT limitation. Operating parameters for the CAS system shall be checked to assure compliance with the manufacturer's recommendations and past compliant practice operating ranges. A canister cycle checklist shall be maintained as the CAS record for all periods when the CEMS is out of service and loading occurs.
- D. During any CEMS downtime or out-of-control period exceeding 24 hours, the HVRU shall be shut down or the CAS exhaust shall be sampled at a frequency equal to 25 percent of the normal operating time to regeneration. The Cyclohexane sampling and analysis shall be performed using an instrument with a FID, or a TCEQ-approved alternative detector. The instrument must

meet all requirements specified in Section 8.1 of EPA Method 21 (40 CFR 60, Appendix A). Sampling and analysis for Cyclohexane concentration shall be performed as follows:

- (1) The instrument shall be calibrated daily with zero and span cylinder calibration gas mixtures. Zero gas shall be certified to contain less than 0.1 ppmv total hydrocarbons. Span calibration gas shall be propane at a concentration within ±10 percent of the normal CEMS span and be certified by the manufacturer to be ±2 percent accurate. Calibration error for the zero and span calibration gas checks must be less than ±5 percent of the span calibration gas value before sampling may be conducted.
- (2) Sample ports or connections must be designed such that air leakage into the sample port does not occur during sampling.
- (3) During sampling, data recording shall not begin until after two times the instrument response time. The Cyclohexane concentration shall be monitored for at least 5 minutes, recording 15-minute averages.
- (4) If the primary analyzer is down for a period of time an equivalent analyzer may also replace the primary in lieu of (D)(1-3) above.
- E. Compliance with the 7.48 lb/hr limit shall be determined on a block hourly average basis. While monitoring during CEMS downtime or out-of-control periods, compliance shall be determined by the highest hourly average.
- F. Records of the CAS monitoring maintained at the plant site shall include (but are not limited to) the following:
  - (1) CEMS monitoring results on a 15-minute average basis, and hourly averages for any time periods when the maximum allowable mass emission rate (lb/hr) is exceeded;
  - (2) CEMS daily calibration and quarterly audit results;
  - (3) Manufacturers recommended operating ranges and actual compliant operating ranges;
  - (4) Results of all periodic monitoring conducted and canister cycle checklists during CEMS downtime or out-of-control periods; and

- (5) Corrective actions taken (including the time and date of that action).
- G. Alternate monitoring or sampling requirements that are equivalent or better may be approved by the TCEQ Regional Director. Alternate requirements must be approved in writing before they can be used for compliance purposes.
- H. The vacuum pressure during carbon bed regeneration shall be maintained at 25 inches of mercury or greater for a period of at least two minutes and shall be monitored by a programmable logic controller. Continuous monitoring and recording of the vacuum level during regeneration shall be performed, and records shall be kept at the plant site.
- I. Visual inspection for carbon build up around the stack shall occur once a week. If carbon build up is noticed, it shall be recorded, the CAS shall be shut down upon completion of loading activities, and corrective action shall be taken in accordance with the system maintenance manual.
- J. All personnel involved in maintenance of the CAS shall be trained in proper maintenance procedures in accordance with manufacturer's recommendations. A record of this training shall be maintained at the plant site for all affected personnel.
- K. Maintenance shall be performed on the CAS according to the manufacturer's recommended guidelines. The permit holder shall maintain records to document that the recommended maintenance has been performed.
- 34. The holder of this permit shall install, calibrate, operate and maintain a CEMS to measure and record the  $H_2S$  concentration in the Unit 1544 Fuel Gas System. The CEMS shall be placed at any location upstream of the common fuel header as long as the CEMS accurately reflects the  $H_2S$  concentration of the fuel gas being burned.
  - A. The CEMS shall meet the design and performance specifications, pass the field tests, meet the installation requirements, data analysis, and reporting requirements specified in the Performance Specification No. 7 for H<sub>2</sub>S, 40 CFR Part 60, Appendix B. Written copies of the results shall be submitted within 60 days of completion of the test to the TCEQ Regional Office.
  - B. The system shall be zeroed and spanned daily excluding weekends and holidays and corrective action taken when the span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days, unless the monitor is required by a subpart of NSPS or NESHAP, in which case zero and span shall be done daily without exception. Each CEMS installed to measure fuel gas H<sub>2</sub>S upstream of each Ethylene Furnace identified as BA-101 through BA-112

- and BA-115 through BA-118 will have a CGA performed at least quarterly. The procedures followed during the CGA shall comply with the requirements of 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2.
- C. Compliance with furnace emission rate sulfur dioxide limits will be ensured through combustion of fuel gas containing less than 162 ppm of H2S on a 3-hour rolling basis as monitored by H2S CEMS.
- D. All CGA exceedances of ±15 percent accuracy and any unscheduled CEMS downtime not corrected within 24-hours shall be reported to the TCEQ Regional Office, and necessary corrective action shall be taken. Unscheduled CEMS downtime is any CEMS downtime not required for daily zero and span checks and annual relative accuracy test audits.
- E. The TCEQ Regional Office shall be notified at least 30 days prior to each annual relative accuracy testing audit in order to provide them the opportunity to observe the testing.

# **Record Keeping and Reporting Requirements**

- 35. The following information shall be recorded and maintained by the permit holder at the plant site and shall be made immediately available to the TCEQ personnel upon request:
  - A. Average hourly CO,  $H_2S$ , and  $NO_x$  concentration (parts per million by volume dry) for each ethylene furnace equipped with CEMS and an hourly average of CO and  $NO_x$  emissions in lb/MMBtu of heat input for each Ethylene Furnace identified as BA115 through BA118.
  - B. Keep records of the initial performance test. After the initial determination of compliance, the holder of this permit shall maintain a raw data file of all CEMS measurements including CEMS performance testing measurements, all CEMS calibration checks and adjustments, and maintenance performed on these systems or measurements of operating conditions monitored identified in the monitoring plan. This data shall be maintained in a permanent form suitable for inspection for at least the last two years. The CEMS data will be used by the TCEQ personnel to determine compliance with permit condition.
  - C. Fuel gas records shall be kept showing examples of the calculation methods, units, conversion factor, assumptions, and basis for the assumptions for all calculations required by the conditions of this permit.
- 36. The following information shall be recorded and maintained at the plant site. The following records shall be submitted to the TCEQ Regional Office on a semiannual basis.
  - The holder of this permit shall comply with the reporting and record keeping requirements of 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to the special conditions of this permit. Each report shall contain the hours of operation of the facility and a report

summary of the periods of noncomplying emissions and CEMS downtimes by cause, in addition to the information specified in 40 CFR  $\S$  60.7(c). Noncomplying CO and NO<sub>x</sub> emissions are any period of continuous operation except during start-up or shutdown. For reporting purposes, noncomplying emissions are defined as follows:

- A. Each one-hour period of operation, except during start-up or shutdown, during which the average emissions of CO, as measured and recorded by each CEMS, exceed the maximum allowable emission rates.
- B. Each one-hour period of operation, except during start-up or shutdown, during which the average emissions of NO<sub>x</sub>, as measured or recorded by each CEMS, exceed the maximum allowable emission rates.

# Maintenance, Startup, and Shutdown (MSS)

37. This permit authorizes the emissions from the facilities identified at the site for the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Attachment C) attached to this permit.

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B may be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and included at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;

E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

- 38. Process units and facilities, with the exception of those identified in Special Conditions 41, 42, 43, 44, and Attachment A shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
  - A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 pounds per square inch (psi) at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
  - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
  - C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
  - D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere,

except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

- (1) For MSS activities identified in Attachment B, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
- (2)The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable-VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 39. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above. Monitoring shall be performed the first time a piece of process equipment is degassed following site procedures. Monitoring is not necessary during future or subsequent degassing of the process equipment as long as it is performed pursuant to the previously used site procedure.

- E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:
  - (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
  - (2) There is not an available connection to a plant control system (flare).
  - (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Special Condition 38.E must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.

- 39. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.
  - A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:
    - (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument\*RF

The RF may be estimated based on process knowledge and basis of determination must me recorded.

(2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
  - (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.
  - (2) The tube is used in accordance with the manufacturer's guidelines.
  - (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

10,000\*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

- C. Lower explosive limit measured with a lower explosive limit detector.
  - (1) The detector shall be calibrated within 30 days of use with a certified gas standard (pentane, propane, ethylene, or methane)in accordance with the manufacturer's recommended method for calibration. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
  - (2) A functionality test shall be performed on each detector within 24 hours of use with the same certified gas standard used for calibration. The daily functionality test should be performed using the manufacturer's recommended method for functionality test. Records, including the date/time and test results, shall be maintained.
- 40. This condition applies only to piping and components subject to leak detection and repair monitoring requirements identified in other NSR permits. Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to

install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

- A. a cap, blind flange, plug, or second valve must be installed on the line or valve; or
- B. the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
- 41. This permit authorizes emissions for the storage tanks during planned floating roof landings. Tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application. Emissions from change of service tank landings, for which the tank is not cleaned and degassed, shall not exceed 10 tons of VOC in any rolling 12 month period. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.
  - A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This requirement does not apply where the vapor under a floating roof is routed to control or a controlled recovery system during this process.
  - B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 24 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning, Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under landed roofs shall be completed as follows:
    - (1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and

controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.

- (2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
- (3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 39.
- (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
- (5) Once VOC concentration in the gas or vapor removed from the storage tank is less than 10,000 ppmv or 10 percent of the LEL, the storage tank may be opened and entered as specified in Condition 6C. However, the tank must be closed and degassing must resume within 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- C. The tank shall not be opened or ventilated without control, except as allowed by (1) below until the criteria in Condition B(1) or one of the criteria in part D of this condition is satisfied.
  - (1) Minimize air circulation in the tank vapor space.
    - a. One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.

- b. Access points shall be closed when not in use.
- D. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
  - (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
  - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
    - a. Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A Appendix 1.
    - b. Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
    - c. Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 40.
  - (3) No standing liquid verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank.

- E. Tanks shall be refilled as rapidly as practicable until the roof is off its legs with the following exceptions:
  - (1) Tanks with landed floating roofs can be filled at any time as follows:

Service Number of Tanks		Fill Rate
Benzene	1	3000 bbls/hr
Cyclohexane	1	3000 bbls/hr
RPG	1	500 bbls/hr

- (2) The vapor space below the tank roof is directed to a control device when the tank is refilled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled must exit through the control device.
- F. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
  - (1) the identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;
  - (2) the reason for the tank roof landing;
  - (3) for the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
    - a. the roof was initially landed,
    - b. all liquid was pumped from the tank to the extent practical,
    - c. start and completion of controlled degassing, and total volumetric flow,
    - d. all standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
    - e. if there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,
    - f. refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
    - g. tank roof off supporting legs, floating on liquid.

- (4) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 Storage of Organic Liquids" dated November 2006 and the permit application.
- 42. Fixed roof storage tanks vented to a control device during normal operation are subject to the requirements of Special Condition 41.C. and 41.D. If the ventilation of the vapor space is controlled, the emission control system shall meet the requirements of Special Condition 41.B.(1) through 41.B.(4). Records shall be maintained per Special Condition 41.F.(3)c through 41.F.(3)e, and 41.F.(4).
- 43. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
  - A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
  - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
    - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
    - (2) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
    - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
      - a. For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a "duckbill" or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
      - b. If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer (such as, but not limited to, scrubbers or carbon adsorbers), VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least

every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 39.A or B.

- C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
- D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.
- E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in Special Condition 43.A through 43.D do not apply.
- F. If the exhaust is controlled with a scrubber and the following conditions are met then the requirements in Special Condition 43.A, 43.B, and 43.D do not apply.
  - (1) The exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the scrubber.
  - (2) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition No.39.A.
  - (3) An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible when the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded.
- 44. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
  - A. Except for labels, logos, etc. not to exceed 15 percent of the tank/vessel total surface area, the exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum effective May 1, 2013. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.

- B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom.
- C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
- D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources Storage Tanks."
- E. If the tank/vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, or if the tank vents are routed to a control device, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.
- 45. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.
- 46. All permanent facilities must comply with all operating requirements, limits, and representations during planned startup and shutdown unless alternate requirements and limits are identified in this permit. Alternate requirements for emissions from routine emission points are identified below.
  - A. Combustion units, with the exception of flares, at this site are exempt from oxides of nitrogen (NOx) and carbon monoxide (CO) operating requirements identified in special conditions in other New Source Review (NSR) permits during planned startup and shutdown if the following criteria are satisfied.
    - (1) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.

- (2) The startup period does not exceed 8 hours in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.
- (3) Control devices are started and operating properly when venting a waste gas stream.
- B. A record shall be maintained indicating that the start and end times of each of the activities identified above occur and documentation that the requirements for each have been satisfied.
- 47. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition or in other conditions of this permit. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through a control device meeting the requirements of this permit condition.

- A. Carbon Adsorption System (CAS).
  - (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
  - (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
    - a. It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
    - b. The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while

that canister functioned as the final polishing canister and a permit deviation shall be recorded.

- (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 39.A or B.
- (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
- (5) Records of CAS monitoring shall include the following:
  - a. Sample time and date.
  - b. Monitoring results (ppmv).
  - c. Canister replacement log.
- (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.

#### B. Thermal Oxidizer.

- (1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.
- (2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of  $\pm 0.75$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 2.5^{\circ}$ C.

- C. Internal Combustion Engine.
  - (1) The internal combustion engine shall have a VOC destruction efficiency of at least 99 percent.
  - (2)The engine must have been stack tested with butane or propane to confirm the required destruction efficiency within the period specified in part (3) below. VOC shall be measured in accordance with the applicable U. S. EPA Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance that may reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition 39.A are also acceptable for this documentation.
  - (3) The engine shall be operated and monitored as specified below.
    - a. If the engine is operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller, documentation for each AFR controller that the manufacturer's or supplier's recommended maintenance has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation. The engine must have been stack tested within the past 12 months in accordance with part (2) of this condition.

The test period may be extended to 24 months if the engine exhaust is sampled once an hour when waste gas is directed to the engine using a detector meeting the requirements of Special Condition 39.A. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The concentrations shall be recorded and the MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background.

b. If an oxygen sensor-based AFR controller is not used, the engine exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the engine. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 39.A. An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded. The engine must have been stack tested within the past 24 months in accordance with part (2) of this condition.

#### D. The plant flare system

- (1) The heating value and velocity requirements in 40 CFR 60.18 shall be satisfied during operations authorized by this permit.
- (2) The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- (3) When degassing process units assist gas shall be added in accordance with the startup/shutdown procedures to ensure adequate Btu/scf at flare tip.
- 48. The following requirements apply to capture systems for the plant flare system.
  - A. Either conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21 once a year. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

B. The control device shall not have a bypass.

or

If there is a bypass for the control device, comply with either of the following requirements:

- (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
- Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals that prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service per this permit.

C. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed. Components that cannot be safely inspected or monitored are exempt from the inspection and monitoring requirements unless they are safe to inspect or monitor at the time of monthly inspections or annual monitoring. Components that are unsafe to inspect or monitor must be identified in a list that is made available upon request.

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49. Planned maintenance activities must be conducted in a manner consistent with good practice for minimizing emissions, including the use of air pollution control equipment, practices and processes. All reasonable and practical efforts to comply with Special Conditions 37 through 48 must be used when conducting the planned maintenance activity, until the commission determines that the efforts are unreasonable or impractical, or that the activity is an unplanned maintenance activity.

#### Permits by Rule Incorporated by Reference

50. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit.

Authorization	Source or Activity	
PBR 78071	Outdoor Abrasive Blast Cleaning	
PBR 79030	Laboratory Storage Tank	

Date: January 9, 2017

# Permit No. 21101 Attachment A INHERENTLY LOW EMITTING ACTIVITIES

	Emissions				
Activities authorized for units under Permit No. 21101	VOC	NOx	CO	PM	Bz
Inspection, maintenance, repair, and replacement of filters, screens, baskets, and strainer	X				X
Inspection, maintenance, blowdown, repair, replacement, adjustment, testing, and calibration of instrumentation/analyzer/analytical equipment	X				X
Inspection, maintenance, repair, and replacement of carbon canister	X			X	X
Catalyst Activation/Deactivation/Charging/Handling	X			X	X
Water washing empty drums, totes, misc. small equipment	X				X
Sample collection and purging	X				X
Soap and other liquid based cleaners	X				
Aerosol cans and other consumables	X				
Inspection, maintenance, blowdown, repair, and replacement of monitoring/measuring equipment(e.g. sight glasses, rotometers, meter proving)	X				X
Pipeline pigging	X				X
Welding					X
Injection quill repair/replacement	X				
Pan emissions associated with exchanger backflushes, deadleg blowdowns, salt dryer inspections/refills, oil changes on pumps and other small motors, pump seal, pump case, seal cooler replacements	X				X

Date:	May 13, 2016
Date.	May 13, 2010

# Permit No. 21101 Attachment B ROUTINE MAINTENANCE ACTIVITIES

Activities authorized for units under Permit No. 21101
Pump repair/replacement
Fugitive component (valve, pipe, flange) repair/replacement
Compressor repair/replacement
Heat exchanger repair/replacement
Vessel repair/replacement
Meter Proving

Date: May 13, 2016

# Permit No. 21101

#### Attachment C MSS ACTIVITY SUMMARY

Activities authorize	Activities authorized for units under Permit No. 21101					
Facilities	Description	<b>Emissions Activity</b>	EPN			
all storage tanks	Storage Tanks Shutdown Roof landing	vent to control device	MSSTANK			
all storage tanks	Storage Tanks purge/degassing/draining	vent to control device	MSSTANK			
all storage tanks	Storage Tanks purging/venting/draining	vent to atmosphere	MSSTANK			
all storage tanks	Storage Tank Refilling	vent to control device	MSSTANK			
all storage tanks	Storage Tanks Startup	vent to flare	MSSAROMFLR			
all process units	process unit shutdown/depressurize/drain	vent to flare	MSS1544FLR, MSSAROMFLR			
all process units	process unit purge/degas/drain	vent to atmosphere	MSSATM			
all process units	process unit startup	vent to flare	MSSCTRL			
all process units and tanks	preparation for facility/component repair/replacement	vent to flare	MSS1544FLR, MSSAROMFLR			
all process units and tanks	preparation for facility/component repair/replacement	vent to atmosphere	MSSATM			
all process units and tanks	recovery from facility/component repair/replacement	vent to flare	MSS1544FLR, MSSAROMFLR			
all process units and tanks	recovery from facility/component repair/replacement	vent to atmosphere	MSSATM			
all process units and tanks	preparation for unit turnaround or facility/component repair/replacement	remove liquid	MSSCTRL			
see Attachment A	Miscellaneous Inherently Low Emitting Activities	see Attachment A	MSSTANK, MSSCTRL, MSSATM			
see Attachment B	Routine Maintenance	see Attachment B	MSSTANK, MSSCTRL, MSSATM			

Date: May 13, 2016

#### Permit Number 21101 and PSDTX1248

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

#### Air Contaminants Data

Emission	Source Name (2)	Air Contaminant	<b>Emission Rates</b>		
Point No. (1)		Name (3)	lbs/hour	TPY (4)	
CA-1	Carbon Adsorption Unit	VOC	7.48	3.01	
DEG-1	Degreaser-1	VOC	0.08	0.33	
DEG-2	Degreaser-2	VOC	0.08	0.33	
E-01-1544	Cracking Furnaces BA-101/102	VOC	2.14	9.40	
	Common Stack (6)	$NO_x$	22.36	97.90	
		СО	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		$PM_{10}$	2.08	9.12	
		$PM_{2.5}$	2.08	9.12	
E-01A-1544	Economizer (6)	VOC	14.05	61.71	
		$NO_x$	143.64	628.92	
		СО	508.25	2,226.23	
		$SO_2$	70.51	112.53	
		PM	13.66	59.88	
		$PM_{10}$	13.66	59.88	
		$PM_{2.5}$	13.66	59.88	

Emission	Source Name (2)	Air Contaminant Name (3)	<b>Emission Rates</b>		
Point No. (1)			lbs/hour	TPY (4)	
E-02-1544	Cracking Furnaces BA-103/104	VOC	2.14	9.40	
	Common Stack (6)	NO <sub>x</sub>	22.36	97.90	
		CO	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		PM <sub>10</sub>	2.08	9.12	
		$PM_{2.5}$	2.08	9.12	
E-02A-1544	Cracking Furnace BA-115	VOC	1.86	8.13	
		NO <sub>x</sub>	130.00	95.40	
		CO	150.00	42.40	
		$SO_2$	9.30	14.85	
		PM	1.80	7.90	
		PM <sub>10</sub>	1.80	7.90	
		$PM_{2.5}$	1.80	7.90	
E-03-1544	Cracking Furnaces BA-105/106 Common Stack (6)	VOC	2.14	9.40	
		NO <sub>x</sub>	22.36	97.90	
		CO	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		PM <sub>10</sub>	2.08	9.12	
		$\mathrm{PM}_{2.5}$	2.08	9.12	
E-03A-1544	Cracking Furnace BA-116	VOC	1.86	8.13	
		NO <sub>x</sub>	130.00	95.40	
		CO	150.00	42.40	
		$SO_2$	9.30	14.85	
		PM	1.80	7.90	
		PM <sub>10</sub>	1.80	7.90	
		$PM_{2.5}$	1.80	7.90	

Emission	Source Name (2)	Air Contaminant Name (3)	<b>Emission Rates</b>		
Point No. (1)			lbs/hour	TPY (4)	
E-04-1544	Cracking Furnaces BA-107/108	VOC	2.14	9.40	
	Common Stack (6)	$NO_x$	22.36	97.90	
		СО	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		PM <sub>10</sub>	2.08	9.12	
		$PM_{2.5}$	2.08	9.12	
E-04A-1544	Cracking Furnace BA-117	VOC	1.86	8.13	
		NO <sub>x</sub>	130.00	95.40	
		СО	150.00	42.40	
		$\mathrm{SO}_2$	9.30	14.85	
		PM	1.80	7.90	
		$PM_{10}$	1.80	7.90	
		$PM_{2.5}$	1.80	7.90	
E-05-1544	Cracking Furnaces BA-109/110 Common Stack (6)	VOC	2.14	9.40	
		$NO_x$	22.36	97.90	
		CO	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		PM <sub>10</sub>	2.08	9.12	
		$PM_{2.5}$	2.08	9.12	

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission Rates		
		Name (3)	lbs/hour	TPY (4)	
E-05A-1544	Cracking Furnace BA-118	VOC	1.86	8.13	
		NO <sub>x</sub>	130.00	95.40	
		СО	150.00	42.40	
		$SO_2$	9.30	14.85	
		PM	1.80	7.90	
		$PM_{10}$	1.80	7.90	
		$PM_{2.5}$	1.80	7.90	
E-06-1544	Cracking Furnaces BA-111/112 Common Stack (6)	VOC	2.14	9.40	
		NO <sub>x</sub>	22.36	97.90	
		СО	82.54	361.54	
		$SO_2$	10.74	17.14	
		PM	2.08	9.12	
		$PM_{10}$	2.08	9.12	
		$PM_{2.5}$	2.08	9.12	
E-06A-1544	Decoke Drum	СО	114.00	35.08	
		PM	61.00	0.96	
		$PM_{10}$	61.00	0.96	
		$PM_{2.5}$	61.00	0.96	

Emission Point No. (1)	Source Name (2)	Air Contaminant	<b>Emission Rates</b>		
		Name (3)	lbs/hour	TPY (4)	
E-07-1544	Steam Superheater BA-113 (6)	VOC	1.21	5.31	
		NO <sub>x</sub>	9.48	41.52	
		CO	13.01	56.99	
		$SO_2$	6.07	9.69	
		PM	1.18	5.16	
		PM <sub>10</sub>	1.18	5.16	
		PM <sub>2.5</sub>	1.18	5.16	
E-CAP	Emission Cap (6)  Includes: E-01-1544 E-02-1544 E-03-1544 E-04-1544 E-05-1544 E-06-1544 E-07-1544 E-07-1544	VOC	14.05	61.71	
		NO <sub>x</sub>	143.64	628.92	
		CO	508.25	2,226.23	
		SO <sub>2</sub>	70.51	112.53	
		PM	13.66	59.88	
		PM <sub>10</sub>	13.66	59.88	
		PM <sub>2.5</sub>	13.66	59.88	

Emission	Source Name (2)	Air Contaminant	Emission Rates		
Point No. (1)		Name (3)	lbs/hour	TPY (4)	
E-08-1544	Heater BA-301	VOC	0.13	0.57	
		NO <sub>x</sub>	1.68	7.35	
		CO	1.41	6.17	
		$SO_2$	0.66	1.05	
		PM	0.13	0.56	
		PM <sub>10</sub>	0.13	0.56	
		$PM_{2.5}$	0.13	0.56	
E-09-1544	Heater BA-401	VOC	0.14	0.59	
		NO <sub>x</sub>	1.73	7.56	
		СО	1.45	6.35	
		$SO_2$	0.68	1.08	
		PM	0.13	0.57	
		$PM_{10}$	0.13	0.57	
		$PM_{2.5}$	0.13	0.57	
E-10-1544	Diesel Engine – Primary	VOC	0.08	0.34	
		$NO_x$	2.99	13.07	
		СО	2.45	10.74	
		SO <sub>2</sub>	0.01	0.04	
		PM	0.10	0.42	
		PM <sub>10</sub>	0.10	0.42	
		$PM_{2.5}$	0.10	0.42	

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<b>Emission Rates</b>	
			lbs/hour	TPY (4)
E-11-1544	Diesel Engine - Secondary	VOC	0.08	0.34
		NO <sub>x</sub>	2.99	13.07
		CO	2.45	10.74
		SO <sub>2</sub>	0.01	0.04
		PM	0.10	0.42
		PM <sub>10</sub>	0.10	0.42
		$PM_{2.5}$	0.10	0.42
E-24-FLARE	Process Flare	VOC	416.50	33.96
	- Normal Operation	NO <sub>x</sub>	90.68	38.34
		CO	362.11	148.24
		SO <sub>2</sub>	0.33	0.83
		H <sub>2</sub> S	0.01	0.01
	Process Flare - Normal Operation Contribution from Acetylene Converter Regeneration (7)	VOC	83.54	0.48
		NO <sub>x</sub>	20.98	2.98
		CO	83.99	11.90
		SO <sub>2</sub>	0.01	0.01
F-N1-VDU	Vapor Destruction Unit N1 for Storage Tanks 815 and 816	VOC	0.16	0.19
		NO <sub>x</sub>	1.31	1.24
		СО	11.24	10.62
		SO <sub>2</sub>	0.01	0.01
F-40-FLARE	Process Flare	VOC	476.58	23.19
		NO <sub>x</sub>	71.49	7.02
		CO	364.28	35.79
		SO <sub>2</sub>	1.41	0.11
		H <sub>2</sub> S	0.01	0.01

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-17-FLARE	Back-Up Flare for Flare 40 (8)	VOC	-	-
		NO <sub>x</sub>	-	-
		СО	-	-
		$\mathrm{SO}_2$	-	-
		$H_2S$	-	-
E-137-CT	Cooling Tower 137 (5)	VOC	5.73	25.11
		PM	3.42	14.96
		$PM_{10}$	1.02	4.48
		$PM_{2.5}$	0.01	0.03
F-294PS	Cooling Tower 294 (5)	VOC	2.77	12.14
		PM	3.30	14.47
		$PM_{10}$	2.10	9.19
		$PM_{2.5}$	0.01	0.03
E-AN-1544	EU-1544 Analyzer Vents Routed to Atmosphere	VOC	0.16	0.65
		$NO_x$	0.01	0.01
		СО	0.01	0.01
E-AN-1740	Flame Ionization Detector	VOC	0.01	0.01
		$NO_x$	0.01	0.01
		CO	0.01	0.01
E-TNK-1544	EU-1544 Miscellaneous Storage Tanks	VOC	4.30	0.03

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<b>Emission Rates</b>	
			lbs/hour	TPY (4)
EU-CATSTACK	Silencer Stack - Normal Operation Emissions from Acetylene Converter Regeneration (7)	VOC	1.00	0.24
		СО	6.00	1.44
		SO <sub>2</sub>	5.83	1.40
		PM	0.25	0.06
		PM <sub>10</sub>	0.25	0.06
		PM <sub>2.5</sub>	0.25	0.06
J-3	Firewater Pump Engine J-3	VOC	0.27	0.01
		NO <sub>x</sub>	9.82	0.49
		СО	2.02	0.10
		$SO_2$	0.01	0.01
		PM	0.21	0.01
		PM <sub>10</sub>	0.21	0.01
		PM <sub>2.5</sub>	0.21	0.01
J-4	Firewater Pump Engine J-4	VOC	0.27	0.01
		NO <sub>x</sub>	9.82	0.49
		СО	2.02	0.10
		SO <sub>2</sub>	0.01	0.01
		PM	0.21	0.01
		PM <sub>10</sub>	0.21	0.01
		$PM_{2.5}$	0.21	0.01
J-3-TNK	Firewater Engine J-3 Diesel Fuel Tank	VOC	0.02	0.01
J-4-TNK	Firewater Engine J-4 Diesel Fuel Tank	VOC	0.02	0.01
T-500	Gasoline Storage Tank	VOC	3.37	0.73
T-502	Diesel Storage Tank	VOC	0.25	0.01
T-FB-203	Wash Oil Tank	VOC	0.74	0.04

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<b>Emission Rates</b>	
			lbs/hour	TPY (4)
800	Storage Tank T-800	VOC	1.98	5.38
809	Storage Tank T-809	VOC	1.49	3.53
822	Storage Tank T-822	VOC	1.69	4.52
2158	Storage Tank T-2158	VOC	1.23	2.42
2176	Storage Tank T-2176	VOC	1.38	2.90
2177	Storage Tank T-2177	VOC	1.47	3.29
F-1746-CU	Cumene Unit Process Fugitives (5)	VOC	0.03	0.11
F-1741	Cyclohexane Unit Process Fugitives (5)	VOC	2.00	8.78
		Freon	2.23	9.77
F-8841	HVRU Process Fugitives (5)	VOC	0.66	2.90
F-138PS	Pump House 138 Fugitives (5)	VOC	0.05	0.22
F-229PS	Pump House 229 Fugitives (5)	VOC	0.22	0.98
F-382PS	Pump House 382 Fugitives (5)	VOC	0.22	0.96
F-1741OFFP	1741 Off Plot Fugitives (5)	VOC	0.25	1.08
F-1740	Fugitive Emissions from CFPU-1740 (5)	VOC	1.04	4.55
F-508	Fugitive Emissions from PS-508 (5)	VOC	0.33	1.43
F-1544	Process Fugitives (5)	VOC	37.81	165.62
		1,3-Butadiene	0.46	2.00
MSSTANK	MSS Tanks	VOC	25.44	4.64
		$NO_X$	1.25	0.36
		CO	1.46	0.42
		SO <sub>2</sub>	0.04	0.01
		PM	0.34	0.05
		PM <sub>10</sub>	0.34	0.05
		$PM_{2.5}$	0.34	0.05
		Benzene	12.68	1.80

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSS1544FLR	MSS Flare 24	VOC	2,933.17	112.11
		NO <sub>X</sub>	464.93	23.62
		СО	3,057.24	148.31
		$SO_2$	254.36	16.96
		$H_2S$	2.71	0.18
		Benzene	139.54	5.99
MSSATM	Atmospheric MSS Emissions	VOC	131.03	1.85
		Benzene	9.67	0.28
		H <sub>2</sub> S	0.01	0.01
		PM	10.84	0.27
MSSCTRL	MSS Controlled Emissions	VOC	68.85	3.41
		Benzene	20.65	1.02
MSSAROMFLR	MSS Flare 40 (or Flare 17)	VOC	166.26	8.42
		NOx	15.21	1.39
		CO	77.52	7.07
		SO2	0.29	0.02
		H <sub>2</sub> S	0.01	0.01
		Benzene	10.45	0.51

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

- volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (3) VOC

- total oxides of nitrogen  $NO_x$ 

- sulfur dioxide  $SO_2$ 

PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as

represented

 $PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented

- particulate matter equal to or less than 2.5 microns in diameter  $PM_{2.5}$ 

- carbon monoxide CO - hydrogen sulfide  $H_2S$ - butadiene BD

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

- (6) Emission Cap (EPN E-CAP) includes EPNs E-01-1544, E-02-1544, E-03-1544, E-04-1544, E-05-1544, E-06-1544, E-07-1544 and E-01A-1544.
- (7) Routine emissions attributed to acetylene converter regeneration activities. These emissions were previously referred to as maintenance, startup, and shutdown (MSS) emissions.
- (8) During periods when Flare 40 (EPN F-40-FLARE) is undergoing maintenance or is otherwise unavailable, Flare 17 (EPN F-17-FLARE) or a temporary flare meeting the requirements of 40 CFR §60.18 shall be used as the control device for all streams normally routed to Flare 40. Simultaneous operation of Flare 40 and Flare 17 or the temporary flare is prohibited. Emissions from Flare 40, Flare 17, and any associated temporary flare shall be limited to the MAERT limits established for Flare 40.

Date: <u>January 9, 2017</u>